Pioneer sound.vision.soul

Operation Manual

ENGLISH

HDD MULTIMEDIA AV NAVIGATION SERVER

AVIC-Z1

Notice to all users:

This software requires that the navigation system is properly connected to your vehicle's parking brake and depending on your vehicle, additional installation may be required. For more information, please contact your Authorized Pioneer Electronics retailer or call us at (800) 421-1404.

The screens shown in the examples may differ from the actual screens.
The actual screens may be changed without notice for performance and function improvements.

Introduction

Manual Overview

This manual provides the important information you need to make full use of your new navigation system. The beginning sections outline the navigation system and describe its basic operation. The later sections describe the details of the navigation functions.
Chapters 10 to 16 describe how to operate the AV functions. Please read these chapters when you use a disc in the built-in DVD drive or operate the Pioneer audio equipment connected to the navigation system.

How to use this manual

Be sure to read the following descriptions

License Agreement (Page 5 to 8)
This provides a licence agreement of this software. Be sure to read this before using the software.

About the Data for the Map Database (Page 11)
This provides the date when the Map Database was recorded.

Copyright (Page 11)
This provides the copyright of the Map Database.

To find the operation procedure from what you want to do

When you have decided what you want to do, you can find the page you need from the "**Table of Contents**".

To find the operation procedure from a menu name

If you want to check the meaning of each item displayed on the screen, you will find the necessary page from the "**Display Information**" at the end of the manual.

Glossary

The section at the end of this manual provides a glossary. See the glossary to find the meaning of a term.

Overview for each chapter

1 Notes before Using the System

For safety reasons, it is particularly important that you fully understand your navigation system before using it. Be sure to read this chapter.

2 **Basic Operation**

Please read this section if you want to operate the navigation system immediately. It will explain the basics of this system.
This section describes the basic operations for navigation.

3 **How to Read Map Display**

This section describes how to read the map screen, and the method of changing map view or map scale.

4 **Modifying Map Configurations**

The behavior of your navigation system depends map display and guidance settings. If you need to change any of current settings, read the relevant section of this chapter.

5 **Setting a Route to Your Destination**

This section describes various ways to search for a destination, to edit the current route conditions, and operate the route during route guidance.

6 **Registering and Editing Locations**

You can register and edit the points on the map. This chapter describes how to register a home location, favorite location, or other location, and how to edit the registered location.

7 **Using Traffic Information**

When Pioneer XM satellite radio tuner (GEX-P10XMT) is connected to the navigation system, the system can acquire traffic information and perform navigation using the traffic information. This chapter describes ways of viewing traffic icons that are displayed on the map and operation related traffic information.

8 **Using XM Tuner and Other Information**

When Pioneer XM satellite radio tuner (GEX-P10XMT) is connected to the navigation system, variety of information other than traffic can be acquired. The navigation system can also register emergency information. This chapter describes ways of the information acquired with XM satellite radio, registration of emergency information.

9 **Using Hands-free Phoning**

When you are using a cellular phone featuring Bluetooth technology by connecting the Bluetooth unit (sold separately) to the navigation system, you can operate your cellular phone hands-free. This chapter describes the operations related hands-free phoning.

10 **Modifying the General Settings for Navigation Functions**

The behavior of your navigation system depends on a number of general settings for navigation functions. If you need to change any of the initial settings (default settings), read the relevant section of this chapter.

11 **Using the AV Source (Built-in DVD Drive and Radio)**

This section describes how to use DVD-Videos, CDs, MP3 discs and the radio.

12 **Using the AV Source (Music Library)**
You can record a music CD to the hard disk drive in the navigation system. This chapter describes recording music and playing back the recorded music.

13 **Using the AV Source (XM, SIRIUS)**
This chapter describes the audio source operation that can be used when XM satellite radio tuner or SIRIUS satellite radio tuner are connected.

14 **Using the AV Source (M-CD, iPod, TV)**
This chapter describes the audio source operation that can be used when Pioneer audio equipment featuring IP-BUS (Multi-CD player, iPod adapter, TV tuner) is connected.

15 **Using the AV Source (AV, EXT, AUX)**
This chapter describes the audio source operation that can be used when an AV equipment with RCA connector (AV input), future Pioneer devices (external unit), and an auxiliary equipment (AUX) are connected.

16 **Customizing the Audio Setting Related with Audio Visual**
Using the audio source, various audio-visual settings are available to suit your tastes. This chapter describes how to change the settings.

17 **Operating Your Navigation System with Voice**
This section describes navigation operations, such as searching the destination and performing audio operations by voice.

Appendix
Please read the appendix to learn more about your navigation system and information such as the availability of after-care. Please see "**Display Information**" at the end of this manual to check the detail for each item on the menu.

Terminology

Before moving on, take a few minutes to read the following information about the conventions used in this manual. They will help you greatly as you learn how to use your new equipment.

- Hardware buttons on your navigation system are described in **ALL CAPITAL**, **BOLD** lettering:
  e.g.)
  MAP button, **MENU** button.
- Items in the different menus or touch keys available on the screen are described in Parenthesis [ ] and **bold**:
  e.g.)
  [**Destination**], [**Settings**].
- Extra information, alternative usages, and other notes are presented like this:
  e.g.)
  ❒ Touch keys which are not available at this time are grayed out.
- The references have relations with that description are indicated like this:
  e.g.)
  ➲ Setting the Route Options ➞ Page 32



The tab on the right corner indicates to which operation the description is related. Navigation operation or AV (Audio Visual) source operation.
For example, “NAVI” indicates that the description is related to the operation for navigation control.
“NAVI/AV” indicates that the description is related to both operation for navigation control and AV control.

About the definition of terminology

“Front Display” and “Rear Display”

In this manual, the screen that is attached to the body of this navigation unit will be referred to as the “Front Display”. Any additional optional screen that is purchased for use in conjunction with this navigation unit will be referred to as the “Rear Display”.

Video image

“Video image” in this manual indicates the moving image from DVD-Video in the built-in DVD drive or from the equipment that is connected to this product with AV-BUS or RCA cable, such as a TV tuner or general-purpose AV equipment.

Color difference of the map display between day and night



Night display

The examples in this manual are illustrated using the daytime display. When driving at night, the colors you see may differ from those shown.

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Before Using the System

Important Safety Information

Before using your navigation system, be sure to read and fully understand the following safety information:

⚠ WARNING

- **Do not attempt to install or service your navigation system by yourself. Installation or servicing of the navigation system by persons without training and experience in electronic equipment and automotive accessories may be dangerous and could expose you to the risk of electric shock or other hazards.**
- **When a route is calculated, the route and voice guidance for the route is automatically set. Also, for day or time traffic regulations, only information about traffic regulations at the time when the route was calculated is shown. One-way streets and street closures may not be taken into consideration. For example, if a street is open during the morning only, but you arrive later, it would be against the traffic regulations so you cannot drive along the set route. When driving, please follow the actual traffic signs. Also, the system may not know some traffic regulations.**

❒ Read the entire manual before operating this navigation system.

❒ The navigation features of your navigation system (and rear view camera option if purchased) are intended solely as an aid to you in the operation of your vehicle. It is not a substitute for your attentiveness, judgment, and care when driving.

❒ Do not operate this navigation system (or the rear view camera option if purchased) if doing so will divert your attention in any way from the safe operation of your vehicle. Always observe safe driving rules and follow all existing traffic regulations. If you experience difficulty in operating the system or reading the display, park your vehicle in a safe location and apply the parking brake before making the necessary adjustments.

❒ Never allow others to use the system unless they have read and understood the operating instructions.

❒ Never use this navigation system to route to hospitals, police stations, or similar facilities in an emergency. Stop using any functions relating to the hands-free phone and please call 911.

❒ Route and guidance information displayed by this equipment is for reference purposes only. It may not accurately reflect the latest permissible routes, road conditions, one way streets, road closures, or traffic restrictions.

❒ Traffic restrictions and advisories currently in force should always take precedence over guidance given by the navigation system. Always obey current traffic restrictions, even if the navigation system provides contrary advice.

❒ Failure to set correct information about the local time may result in the navigation system providing improper routing and guidance instructions.

❒ Never set the volume of your navigation system so high that you cannot hear outside traffic and emergency vehicles.

❒ To promote safety, certain functions are disabled unless the vehicle is stopped and/or the parking brake is applied.

❒ The data encoded in the hard disk drive for the navigation system is the intellectual property of the provider, and the provider is responsible for such content.

- ❒ Keep this manual handy as a reference for operating procedures and safety information.
- ❒ Pay close attention to all warnings in this manual and follow the instructions carefully.
- ❒ Do not install this navigation system where it may (i) obstruct the driver's vision, (ii) impair the performance of any of the vehicle's operating systems or safety features, including air bags, hazard lamp buttons or (iii) impair the driver's ability to safely operate the vehicle.
- ❒ Please remember to wear your seat belt at all times while operating your vehicle. If you are ever in an accident, your injuries can be considerably more severe if your seat belt is not properly buckled.
- ❒ Never use headphones while driving.

Additional Safety Information

To ensure safe driving

Parking brake interlock

Certain functions (such as viewing of DVD video and certain touch key operation) offered by this navigation system could be dangerous and/or unlawful if used while driving. To prevent such functions from being used while the vehicle is in motion, there is an interlock system that senses when the parking brake is set and when the vehicle is moving. If you attempt to use the functions described above while driving, they will become disabled until you stop the vehicle in a safe place, and apply the parking brake. Please keep the brake pedal pushed down before releasing the parking brake.

⚠ WARNING

- **To avoid the risk of damage and injury and the potential violation of applicable laws, the navigation system is not for use with a "Video image" that is visible to the driver.**
- **In some countries or states the viewing of "Video image" on a display inside a vehicle even by persons other than the driver may be illegal. Where such regulations apply, they must be obeyed.**
- **When applying the parking brake in order to view "Video image" or to enable other functions offered by the navigation system, park your vehicle in a safe place, and keep the brake pedal pushed down before releasing the parking brake if the vehicle is parked on a hill or otherwise might move when releasing the parking brake.**

⚠ CAUTION

- **Accuracy/performance of interlock may be impacted by such factors as GPS signal detection, speed pulse wire connectivity, and driving habits or conditions of the place where the vehicle is parked.**
- **It is strongly suggested that the speed pulse wire be connected for accuracy of navigation and better performance of interlock.**
- **If the speed pulse wire is unavailable for some reason, it is recommended that the pulse generator ND-PG1 (sold separately) be used.**

When you attempt to watch "Video image"s while driving, the warning "**Viewing of front seat video source while driving is strictly prohibited.**" will appear on the screen. To watch "Video image"s on this display, stop the vehicle in a safe place, and apply the parking brake. Please keep the brake pedal pushed down before releasing the parking brake.

About rear view camera and [Rear View] mode

With an optional rear view camera, you are able to use the navigation system as an aid to keep an eye on trailers, or backing into a tight parking spot.

⚠ WARNING

- **SCREEN IMAGE MAY APPEAR REVERSED.**
- **USE INPUT ONLY FOR REVERSE OR MIRROR IMAGE REAR VIEW CAMERA. OTHER USE MAY RESULT IN INJURY OR DAMAGE.**

Features (Characteristics of this software)

Touch panel key operation

It is possible to operate the navigation function and the Audio function by using touch panel key.

Variety of View Modes

Various types of screen display can be selected for navigation guidance.
– [Map Mode], [Mixed Mode], [Route View], [Driver's View], and [Twin Map View]
The split screen mode is also available.
– [Rear View] (Rear view camera screen and Navigation map screen)
– [Vehicle Dynamics]
You can also display information on vehicle speed, acceleration, and voltage, etc.

⚠ CAUTION

- **The rear view mode is to use the navigation system as an aid to keep an eye on the trailers, or while backing up. Do not use this function for entertainment purposes.**

Wide Variety of Facility Information for Points of Interest (POI) Search

You can search your destination from all areas.
– Approximately 11 million POIs are included in this database as of January 2005.
– Some POI information may not be accurate or may become inaccurate through the passage of time. Please directly contact the POI to verify the accuracy of the information about the POI which appears in this database. POI information is subject to change without notice.

Auto Reroute Function

If you deviate from the set route, the system will re-calculate the route from that point so that you remain on track to the destination.

❒ This function may not work in certain areas.

Auto CD title and MP3 file listing

Title lists will automatically be displayed when a CD TEXT or MP3 disc is played. This system provides easy-to-operate audio functions that allow playback simply by selecting an item from the list.

Data communication function with XM tuner

If you connect the optional XM tuner (GEX-P10XMT) to the navigation system, you can use traffic information as a part of the navigation function. Separate subscription for XM NavTraffic required.

In addition, if you subscribe to XM Audio services, you can utilize the XM display which features station logos and category icons, improving your XM Audio experience.

➲ Using XM NavTraffic Information ➞ Page 67

➲ Listening to XM Satellite Radio ➞ Page 127

❒ The icon of each broadcast station is contained in the hard disk drive based on the data provided by XM Satellite Radio as of December 2005.
Any changes made by XM Satellite Radio in the lineup or icon of the broadcast station in the future may not be supported by the navigation system, and may cause the unit not to display the correct icons.

About XM NavTraffic Service and Pioneer Navigation

❒ XM NavTraffic subscription is required and is available only in select markets. Check www.xmnavtraffic.com for service availability, pricing information, and other details. The availability of XM NavTraffic data depends on the ability of the antenna to receive a signal. The signal may be unavailable if obstructed (e.g., by buildings, mountains, trees, bridges, bad weather, etc.). XM NavTraffic data also may be unavailable or not current if the original data source is not providing data (e.g., scheduled or unscheduled downtime) or has not been updated itself or if there is a time lag between the time the original data source is updated and when you receive the updated XM NavTraffic data.

❒ Depending on the amount of data being transmitted in your area, it may take several minutes to display all of the available data.

❒ The information content depends on the information provided by XM NavTraffic Service, including data refresh and availability timing.

❒ Pioneer does not bear responsibility for the accuracy of the information transmitted.

❒ Pioneer does not bear responsibility for changes to information services provided by XM, such as cancellation of the services or subscription update.

❒ Traffic information is not taken into account when calculating estimated time of arrival time or travel time for your destination.

Notes for Hard disk drive

Recording equipment and copyright

Recording equipment should be used only for lawful copying and you are advised to check carefully what is lawful copying in the country in which you are making a copy. Copying of copyright material such as films or music is unlawful unless permitted by a legal exception or consented to by the right owners.

About writing data to the hard disk drive at low temperature

Writing to the hard disk drive such as recording music to the music library may be disabled when the navigation system detects abnormally low temperatures inside the vehicle. Functionality will become available once the temperature inside the vehicle returns to normal.

When recording please pay attention to these points;

- Pioneer does not compensate for the contents that could not be recorded or any loss of recorded data due to a malfunction or failure of the navigation system.
- The data recorded on the navigation system is not allowed to be used without a permission from its right holder under copyright law except for personal entertainment.
- Make sure to check the recording operation before recording and check the recorded contents after recording.
- Recording is not guaranteed for all CDs.

About the data saved or recorded by the customer

- The data saved or recorded onto this navigation system by the customer cannot be extracted from the navigation system, and those service cannot be accepted.
- The data saved or recorded onto this navigation system by the customer cannot be guaranteed during repair or service. Lost data that was saved or recorded by the customer is not guaranteed.
- Due to copyrights, the music data recorded into the Music Library cannot be backed up during repair or service.

Failure to operate

Should the navigation system fail to operate properly, contact your dealer or the nearest authorized Pioneer service facility.

After-sales service for Pioneer products

Please contact the dealer or distributor from which you purchased the product for after-sales service (including warranty conditions) or any other information. In case the necessary information is not available, please contact the companies listed below.

Please do not ship your product to the companies at the addresses listed below for repair without making advance contact.

U.S.A

Pioneer Electronics (USA) Inc.
CUSTOMER SUPPORT DIVISION
P.O. Box 1760
Long Beach, CA
90801-1760
800-421-1404

CANADA

Pioneer Electronics of Canada, Inc.
CUSTOMER SATISFACTION DEPARTMENT
300 Allstate Parkway
Markham, Ontario
L3R OP2
1-877-283-5901

For warranty information, please see the Limited Warranty sheet included with your product.

Product registration

Visit us at the following site:

http://www.pioneerelectronics.com

1. Register your product. We will keep the details of your purchase on file to help you refer to this information in the event of an insurance claim such as loss or theft.
2. Receive updates on the latest products and technologies.
3. Download owner's manuals, order product catalogues, research new products, and much more.
4. Receive notices of software upgrades and software updates.

Flow from Startup to Termination

At first, please confirm the positions of the following features using the “Hardware Manual”.

- **MAP** button
- **MENU** button
- **AV** button
- **OPEN CLOSE** button

1 Start the engine to boot up the system.
After some time, the navigation opening screen comes on for a few seconds. Then, a message screen is displayed.

2 Check the details of the cautionary message and touch [OK].
You can operate the navigation system by touching keys displayed on the screen.
The map of your surroundings is displayed.
If the route is already set, the screen changes to route guidance mode.

When you use the navigation system for the first time, [**Regional Settings**] screen appears. On [**Regional Settings**] screen, you can change the language or time. (The settings can also be changed afterward.)

➲ “Customizing the Regional Settings” ➞ Page 91

➲ How to read the current position screen ➞ Page 37

➲ Setting the time ➞ Page 92

❒ To protect the LCD screen from damage, be sure to touch the touch keys with a finger. (The stylus is supplied for special calibrations. Do not use the stylus for normal operations.)

3 Press the MENU button.
Displays the navigation menu.

4 Assign a destination by using the touch panel key and beginning route guidance, or operate the Audio source.



❒ Touch keys which are not available at this time are grayed out.

➲ Specifying the address and searching the destination ➞ Page 25

➲ Searching the destination by map ➞ Page 43

➲ Other search methods ➞ Page 51 to 56

➲ How to use audio source ➞ Page 99 to 159

5 Turn off the vehicle engine to terminate the system.
This navigation system is also turned off.

❒ Until your vehicle reach the vicinity of the destination, the set route will not be deleted even if the engine is turned off.

How to Use Navigation Menu Screens

The basic operation of the navigation is performed by using menus.
The navigation menu is divided into four: [**Destination**], [**Information**], [**Map**], and [**Settings**].

Displaying Navigation menu

1 Press the MENU button.

2 To change to the menu you want to use, touch the name of the menu displayed at the top of the screen.

3 If you want to return to the map, press the MAP button.

Navigation menu overview

[Destination] menu



Also you can check your route, and the set route can be canceled from this menu.

➲ Specifying the address and searching for the destination ➞ Page 26

➲ Other search methods ➞ Page 51 to 56

[Information] menu



Use this menu to check traffic information using the GEX-P10XMT*1.
If you are using the cellular phone featuring Bluetooth technology by connecting the Bluetooth unit (ND-BT1)*2 to the navigation system, you can configure Bluetooth settings or check the outgoing/incoming call history. Also use to register information for emergencies.

❒ [**Traffic On Route**], [**Traffic Events**], [**Traffic Flow**], [**Stock Info**], [**Browse**], and [**My Favorites**] can be active only when the GEX-P10XMT*1 is connected to the navigation system.

❒ [**Phone Menu**] can be active only when the Bluetooth unit (ND-BT1)*2 is connected to the navigation system.

GEX-P10XMT*1:
XM Digital Satellite Data & Audio Receiver (sold separately). Traffic information only available for cities where information is provided by XM NavTraffic service. Active subscription to XM NavTraffic required to receive traffic information on the navigation system.

➲ Confirming traffic information ➞ Page 68

➲ Registering information for emergencies ➞ Page 78

ND-BT1*2:
Sold separately. Use for hands-free phoning and business card transfer via Bluetooth technology. And business card transfer via Bluetooth technology.

[Map] menu



You can change the [**View Mode**], or set the items to be displayed during the navigation function.

❒ [**View Mode**] can be selected only when the vehicle position is at the current position. If you want to select [**View Mode**] while scrolling the map, press the **MAP** button to locate the vehicle position back to the current position.

Settings menu



Customize the navigation functions so they can be used easily.

➲ Settings menu ➞ Chapter 9

Buttons you can use

The availability of a specific button or function is indicated by its color. Depending on the status of your vehicle, some buttons will be available, while others will not be.



Light gray touch key: The button is operable.



Dark gray touch key: The function is not available (e.g., operation is prohibited while driving).

Basic Navigation

⚠ CAUTION

- **For safety reasons, you cannot use some of these basic navigation functions while your vehicle is in motion. To enable these functions, you must stop in a safe place and apply the parking brake (see page 18 Interlock for details).**

Basic flow of operation

1 Park your vehicle in a safe place, and apply the parking brake.

2 Press the **MENU** button to display the navigation menu.

3 Select the method of searching for your destination.

4 Enter the information about your destination to calculate route.

5 Confirm the location at the map.

6 Checking and fixing the route.

7 Your navigation system sets the route to your destination, and the map of your surroundings appears.

8 After releasing the parking brake, drive in accordance with the navigation information, subject to the important safety instructions noted on page 18 to 19.

How to calculate your destination by using Address Search

The most frequently used function is [**Address Search**], in which the address is specified and the destination is searched. This section describes how to use [**Address Search**] and the basics of using the navigation system.

1 Press the MENU button to display the navigation menu.

2 Touch [Destination] in the navigation menu.

3 Touch [Address Search].

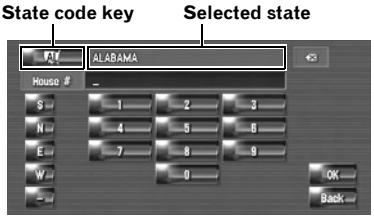
Select the method for searching the destination.



4 Touch [State code key] to select the state, province, or territory.

If the destination is in another state, this changes the state setting.

- ❒ Once the state has been selected, you only have to change states when your destination is outside of the state you selected.



:

The input text is deleted one letter at a time from the end of the text. Continuing to touch deletes all of the text.

[Back]:

Returns you to the previous screen.

5 Input the house number and touch [OK].

Touch the characters you want to input.

- ❒ Also input a prefix to the house number.
- ❒ Touching [**OK**] with no input allows you to specify and search for a street name or the name of the city or area first.

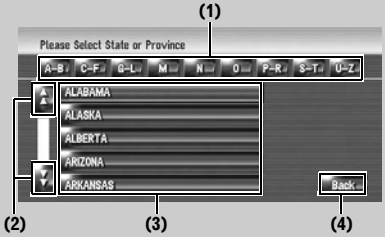
6 Input the street name.

When the options are narrowed down to six or less, a list of the matched streets automatically appears.

When you enter the same characters as those entered previously, the system automatically displays the character that follows the entered characters. (Auto fill-in function.)

- ❒ For example, You can just enter part of the name, such as [California] for [Early California ct].
- ❒ When entering the characters, the unit will automatically search the database of all possible options. If there is only one letter that could possibly follow your entry, that letter will automatically be entered.
- ❒ A list appears if multiple options exist. Select the desired one from the list, and proceed to the next step. In rare cases, you need to input the city name to determine the city.

Operation of state selection screen



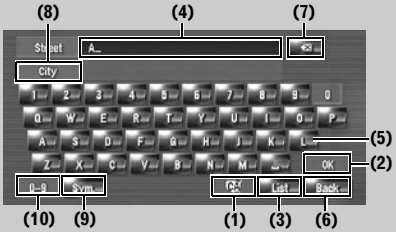
(1) [A-C] to [U-Z] :
Use to jump to the first state, province, or territory which state with that alphabet.

(2) :
Use to see the next page or previous page of the list.

(3) State list:
Pressing one of these items, set that as search area.

(4) [Back]:
Returns previous screen.

Operation of street name or city name input screen (e.g. QWERTY keyboard)



(1) State code key :
Jump to the state selection screen. (Selected state code is displayed.)

(2) [OK] :
Confirms the characters displayed in (4), and proceeds to the next step.

(3) [List] :
Lists candidates based on yellow characters in (4). Touch the desired item in the list to proceed to the next step.

➲ Auto fill-in function ➞ Page 27

(4) Text box:
Displays the characters that are entered.

(5) Keyboard:
Use to enter the text.

(6) [Back]:
Returns previous screen.

(7) :
The input text is deleted one letter at a time from the end of the text. Continuing to touch deletes all of the text.

(8) [City]:
Touch if you want to specify the destination city or area first. (This is available only when (4) is blank.)

(9) [Sym.]:
You can input text with marks such as [**&**] or [**+**].

(10) [0-9]:
You can input text with numbers.

[Center]:
This can be selected when you enter a city or area name first. Touch this button to display the central point of the entered city or area. Touching [**OK**] searches the route to the central point. Proceed to Step 9.

❒ You can customize the keyboard type to be displayed on the screen.

➲ "Customizing the keyboard layout" ➞ Page 92

(11) Street:
Touch if you want to return the street input mode. (This is available only when (8) is blank.)

Auto fill-in function



The previously entered characters are stored for each state. The next time a character is entered, suggested character will be shown. For example, if [E 220TH ST] has been entered in the past, when you input a letter just [E], [E 220TH ST] will be fill-in automatically. The manually input characters are displayed in yellow, and the suggested characters are displayed in white, so you can distinguish them. To determine the filled-in character, touch [**OK**].

7 Touch the street from the list.



If the selected street has only one matching location, the destination display screen appears. Proceed to Step 9.

8 Touch the city or area where your destination is located.

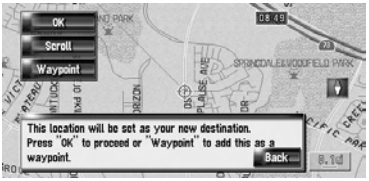


"Location confirmation screen" appears.

- If there is no matching location, the navigation system displays [**The address does not exit. Do you want to continue ?**]. When you touch [**Yes**], a place near the specified location appears. In this case, pay attention to the displayed location may not be suitable for your intention. If you want to try again, touch [**No**] to return to the previous screen.
- If you did not input the house number in Step 5, the house number input screen appear after this step. You should input the house number now (perform Step 5).

9 Touch [OK] after checking the location.

"Location confirmation screen"



Route calculation starts.



When the route calculation is completed, "Route Confirmation screen" appears.

Operation of street list screen



(1) Number of possible choices

(2) :

Touching or on the scroll bar scrolls you through the list and allows you to view the remaining items.

(3) :

If the character that cannot be displayed within the displayed area, touching to the right of the item allows you to see remained characters.

(4) :

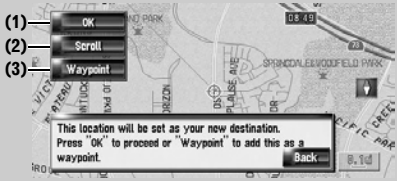
Touching displays a map of the place you have selected. (Possibilities for place names may appear with the list screen.) You can also set a destination by touching to the right of the list. Touching [**OK**] set the location pointed by the scroll cursor as your destination.

(5) [Back] :

Returns previous screen.

To check the location at the map

"Location confirmation screen"



(1) Calculating the route to the destination

Route calculation starts. When the route calculation is completed, "Route Confirmation screen" appears.

❒ If you press the **MAP** button or **MENU** button during route calculation, the calculation is canceled and the map screen appears.

(2) Scrolling the map

The map display changes to the scroll mode. The scroll mode can fine-adjust the location, and then you can set the location as your destination or do various operation by using the shortcut menu.

➲ Shortcut menu ➞ Page 43

(3) Setting the location as waypoint

The location indicated by the scroll cursor will be set as a waypoint.

➲ Adding a waypoint ➞ Page 34

10 Touch [OK] to decide your route.



Checking and fixing the route

You can check the route details. You can also recalculate the route in different conditions.

Route Confirmation screen



(1) Route calculation condition

Shows the route has been calculated under those conditions.

- shows that fast route is prioritized.
- shows that short route is prioritized.
- shows that using the highway and main road are is prioritized.
- shows that use or disuse of freeway.
- shows that use or disuse of toll road.
- shows that use or disuse of ferry.
- shows that use or disuse of learning route.

In addition, if the calculated route have unintended results, the following icons will be shown.

- shows that the route use freeway against the setting [**Avoid Freeway**] is [**On**].
- shows that the route use toll road against the setting [**Avoid Toll Road**] is [**On**].
- shows that the route use ferry against the setting [**Avoid Ferry**] is [**On**].

❒ may be displayed with the calculated route even if [**Avoid Freeway**] is [**On**]. That means the reference route if you use the freeway.

(2) Distance to the destination

(3) Travel time to destination

(4) Fixes the displayed route

Fixes the displayed route, and starts the route guidance.

➲ When the route guidance starts ➞ Page 31

(5) Displaying multiple routes

You can select a desired route from multiple route options. Calculated routes are shown in different colors.

There can be cases that the same route is displayed even when multiple routes are searched.



Touching 1 to 6 switch to another route. Touching [**OK**] returns to the previous display.

If you set waypoints, you cannot use multiple route option.

(6) Changing the route calculation condition

Modify each calculation condition, and recalculate the route.

➲ Refer to after Step 3 of “Modifying the route calculation conditions” ➞ Page 32

(7) View the route

You can check the streets which you will go through the destination.

➲ Refer to “Checking the route by text” ➞ Page 33

(8) Checking the shape of route

You can check overall shape of your route and the location of destination on the map.

➲ Refer to after the Step 2 of “Checking the entire route overview at the map” ➞ Page 34

(9) Adding and editing the waypoint

You can add/remove or sort waypoints.

➲ “Editing Waypoints” ➞ Page 34

When the route guidance starts

Touching [**OK**] in "Route Confirmation screen" starts the route guidance on the displayed route. Your navigation system gives you the following information with the timing adjusted to the speed of your vehicle:

- Distance to the next turning point
- Direction of travel
- Road number of the freeway
- Arrival of waypoint (If waypoints are set)
- Arrival of your destination

❒ Touching  or  allows you to turn the voice guidance on or off.

❒ Touching  allows you to hear the information again.

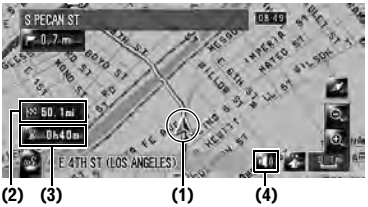
❒ If you stop at a gas station or a restaurant during the route guidance, your navigation system remembers your destination and route Information. When you start the engine and get back on the road, the route guidance resumes.

❒ If you deviate from the route with guidance set to [**Route View**] or [**Guide Mode**] and enter a street not recorded on the hard disk drive, the screen changes to [**Map Mode**]. When you return to the route, returns to the original view and resumes route guidance.

Basic items on the guidance

This section describes only the basic items that are displayed on the Map Mode screen.

➲ Details of the map screen ➞ Page 37



(1) Current location

(2) Distance to the destination

(3) Estimated time of arrival (default)

(4) ON/OFF key of voice guidance

Canceling the Route Guidance

If you no longer need to travel to your destination or if you want to change your destination, follow the steps below to cancel the route guidance.

1 Touch [Destination] in the navigation menu, then touch [Cancel Route].

The message confirming whether to cancel the current route appears.

2 Touch [Yes].



The current route is deleted, and a map of your surroundings reappears.

On this screen, you can also select the following items:

Skip :

Skip the route to the selected waypoint, and the route is recalculated. (The skipped waypoint will not be deleted.)

No :

Returns to the previous display without deleting the route.

Modifying the Route Calculation Conditions

You can modify the conditions for route calculation and recalculate the current route.

1 Touch [Destination] in the navigation menu, and then touch [Route Overview].

❒ [**Route Overview**] is displayed only when the route is set.

2 Touch [Options].



3 Touch the desired items to change the route calculation conditions and then touch [OK].



The route is recalculated, and "Route confirmation screen" appears.

When a single route is calculated, the system searches the route that meets these conditions as much as possible.

❒ A single route is calculated in the following cases:

— When a waypoint is set
— When a route is set through voice recognition
— When auto reroute is carried out

Items that users can operate

Settings marked with an asterisk (*) show that they are default or factory settings.

Route Condition
This setting controls which the route should be calculated by taking into account the time or the distance or the main road.

Determine which condition takes priority for route calculation.

[Fast]*:
Calculate a route with the shortest travel time to your destination as a priority.

[Short]:
Calculate a route with the shortest distance to your destination as a priority.

[Main Road]:
Calculate a route that passes major arterial road as a priority.

Avoid Toll Road
This setting controls whether toll roads (including toll areas) should be taken into account.

[On]:
Calculate a route that avoids toll roads (including toll areas).

[Off]*:
Calculate a route that may include toll roads (including toll areas).

❒ The system may calculate a route that includes toll road even if [**On**] is selected.

Avoid Ferry
This setting controls whether ferry crossings should be taken into account.

[On]:
Calculate a route that avoids ferries.

[Off]*:
Calculate a route that may include ferries.

❒ The system may calculate a route that includes freeway even if [**On**] is selected.

Avoid Freeway
This setting controls whether freeways may be included in the route calculation.

[On]:
Calculate a route that avoids freeways.

[Off]*:
Calculate a route that may include freeways.

❒ The system may calculate a route that includes freeway even if [**On**] is selected.

Learning Route
The system learns the travel history of each road and directional tendency.
This setting controls whether or not the travel history should be taken into account.

[On]*:
Calculate the route with the travel history taken into account.

[Off]*:
Calculate the route without the travel history taken into account.

[Clear]:
Clear the current travel history.

Checking the Current Route

You can check information about the route between your current location and your destination.
You can select two methods:
- Checking the passing streets with a list.
- Checking the route by scrolling the map along the route.

Checking the route by text

You can check the route details.

❒ This function is not available if your vehicle has deviated from the route.

1 Touch [Destination] in the navigation menu, and then touch [Route Overview].
Route confirmation screen appears.
❒ [**Route Overview**] is displayed only when the route is set.

2 Touch [Profile].



3 Touch ▲ or ▼ to scroll the list.
Scroll the list as necessary.

Names of the streets you are driving through



Turning direction **Driving distance**

4 Touch [Back].
You can return to the previous display.
❒ When a long distance route is calculated, your navigation system may not be able to list all roads. (In this case, the remaining roads will be shown in the list as you drive on.)

Checking the entire route overview at the map

You can check the entire shape of the current route.

1 Touch [Destination] in the navigation menu, and then touch [Route Overview].
Route confirmation screen appears.
❒ [**Route Overview**] is displayed only when the route is set.

2 Touch [Detail].



3 Touch the screen and place the scroll cursor on the point whose detail or entire picture you want to view. Or zoom in or zoom out the map scale.



The map around the scroll cursor is zoomed in or out so you can view the detail or the entire picture.

4 Touch [Back].

You can return to the previous display.

❒ You can also check the overview by using the shortcut menu if [**Whole Route Overview**] is selected on the [**Short-Cut Selection**].

Editing Waypoints

You can select waypoints (locations you want to visit on the way to your destination) and you can recalculate the route to pass through these locations.

Adding a waypoint

Up to 5 waypoints can be selected, and selected points can be sorted automatically or manually.

1 Touch [Destination] in the navigation menu, and then touch [Route Overview].

2 Touch [Waypoints].

The waypoint menu screen appears.

3 Touch [Add].



Switch the display to search for points. After searching for a point, display it on a map, then touch [**OK**] to add to the waypoints. (You can add up to five waypoints in total.)

4 Touch [OK].

A route is recalculated, and “Route confirmation screen” appears.

❒ If you set a waypoint(s) in the route to your destination, the route up to the next waypoint will appear light green. The rest of the route will be light in blue.

Deleting a waypoint

You can delete waypoints from the route and then recalculate the route. (You can delete waypoints successively.)

1 Touch [Destination] in the navigation menu, and then touch [Route Overview].

2 Touch [Waypoints].
The waypoint menu screen appears.

3 Touch [Delete], then touch the waypoint you want to delete.
The touched waypoint will be deleted from the list.

4 Touch [OK].
The route is recalculated, and "Route confirmation screen" appears.
➲ "Checking and fixing the route" ➞ Page 30

Sorting waypoints

You can sort waypoints, and recalculate the route.

1 Touch [Destination] in the navigation menu, and then touch [Route Overview].

2 Touch [Waypoints].
The waypoint menu screen appears.

3 Touch [Sort], then touch [Automatic] or [Manual].



Automatic:
You can sort the destination and waypoints automatically. The system will show the nearest waypoint (distance in a straight line) from the current location as waypoint 1, and sort the other points (including your destination) in order of distance from your current location.

Manual:
You can manually sort destination and waypoints. Touch the destination and waypoints on the left side of the screen in the order you want to visit. The touched destination and waypoints are displayed on the right side of the screen.



4 Touch [OK].
The route is calculated again, and "Route confirmation screen" appears.
➲ "Checking and fixing the route" ➞ Page 30

Skipping a waypoint

If the points are set, the next waypoint along the route can be skipped.

1 Touch [Destination] in the navigation menu, and then touch [Cancel Route].

2 Touch [Skip].
A new route to your destination through all remaining waypoints, except for the skipped waypoint, is calculated.
The "Route confirmation screen" appears.
➲ "Checking and fixing the route" ➞ Page 30

How to Read Map Display

How to Use the Map

Most of the information provided by your navigation system can be seen on the map. You need to get to know how the information appears on the map.

Switching the view mode

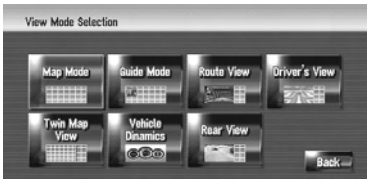
There are five types of map display and two additional view modes.

- **Map Mode**
- **Driver's View**
- **Twin Map View**
- **Guide Mode** (during route guidance only)
- **Route View** (during route guidance only)
- **Vehicle Dynamics**
- **Rear View** (Only possible when the [**Camera Input**] is set to [**On**].)

1 Press the MAP button to display a map of the area around your current position.

2 Press the MAP button again.

3 Touch the mode name or press the MAP button to select the mode you want to display.



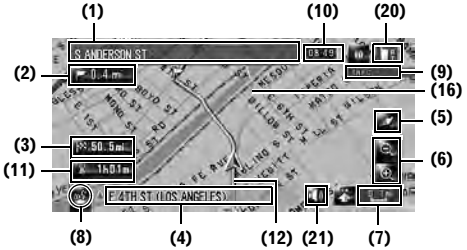
❒ You can display the view mode screen by touching [**Map**] in the navigation menu, and touching [**View Mode**].

How to view the map of the current location

❒ This example shows the case where [**Second Maneuver Arrow**] is set to [**View**].

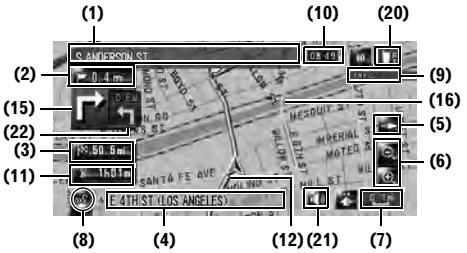
Map View

Displays standard map.



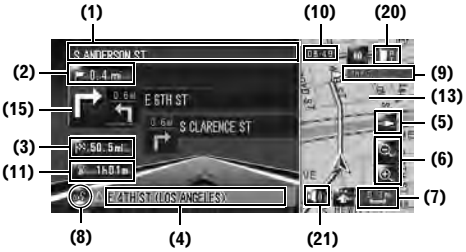
Guide View

The standard map of your surroundings is overlaid with the name of the street you will turn onto next, and 2 arrows: the larger one on the left indicating the direction of your next maneuver and how far you are from approaching it, and the smaller one on the right indicating the direction of your second to next maneuver and how far you are from approaching it.



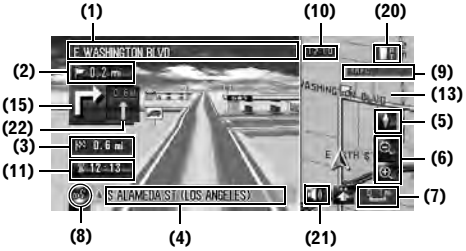
Route View

Displays the name of the street you will next travel along and an arrow indicating the direction of travel.



Driver's View

The map from the driver's viewpoint is shown.



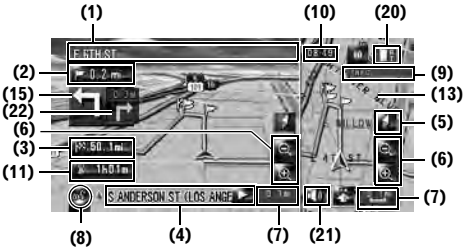
About the 3D POI

The specified POI appears in 3D. (Only the POI sign may appear if there is not a 3D data.)

❒ The displayed 3D POI or POI sign in the left screen is not related [**Overlay POI**].

Twin Map View

You can split the screen vertically in half. The right screen and the left screen can display a map in different scales. If you set [**Twin View 2D/3D**] to [**3D**], a 3D map appears on the left screen.



➲ Twin View 2D/3D ➞ Page 45

Vehicle Dynamics Display

Indicates the status of your vehicle.

⚠ CAUTION

- **In the Vehicle Dynamics Display mode, the speedometer display may show a different speed than your vehicle's actual speedometer, because your unit measures speed in a different way.**

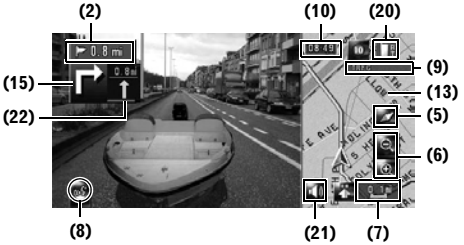


❒ You can change the items indicated on the left and right meters.

➲ Setting the **Vehicle Dynamics** Display ➞ Page 78

Rear View

Rear view image is displayed on the left-hand side of the screen, while the map of your surroundings is indicated on the right.



❒ If the [**Camera Input**] is set to [**Off**], the rear view image is not displayed. Please set it to [**On**].

➲ Camera setting ➞ Page 154

❒ When using a camera set to turn On/Off in conjunction with the reverse signal, no camera images will be displayed in rear view mode while you are moving forward.

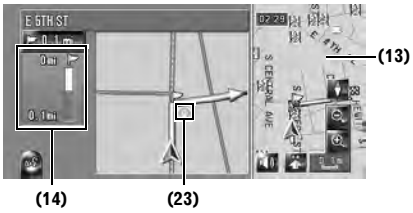
❒ If the camera is set always On, it can display images in rear view mode when the vehicle is moving forward. In that case, you should ask the camera maker or dealer whether the camera's functions or lifetime would be affected.

❒ **Rear View** can be displayed at all times (e.g. when monitoring an attached trailer, etc.) as a split screen where map information is partially displayed. Please beware that in this setting, camera image is not resized to fit to screen, and that a portion of camera image may not be viewable.

Enlarged map of the intersection

This screen is displayed only when [**Close Up View**] in the [**Map**] menu is [**2D**] or [**3D**].

Enlarged map of the intersection (2D)



Enlarged map of the intersection (3D)

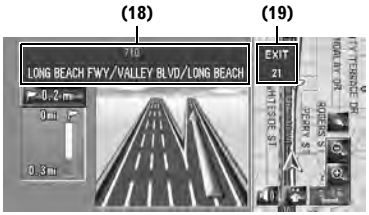


Display during freeway driving

In certain locations of the freeway, lane information is available, indicating the recommended lane to be in to easily maneuver the next guidance.



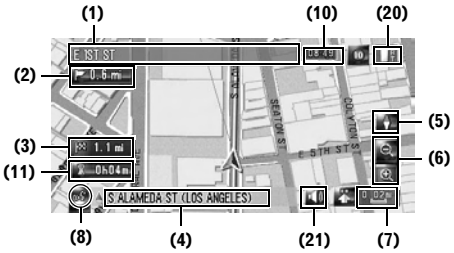
While driving on the freeway, freeway exit numbers and freeway signs may be displayed when in the vicinity of interchanges and exits.



❒ If the data for these items are not contained in the hard disk drive, the information is not available even if there are the signboards on the actual road.

City Map

When [**City Map**] in the [**Map**] menu is [**On**], in certain metropolitan city areas, a more detailed [City Map] is available at the 0.05 mi (50m) map scale or lower. (The screen changes automatically when you enter certain metropolitan city area.)



❒ The detailed city map may not appear for the following reasons:

- The data for that city area is not contained in the hard disk drive.
- When you are driving on a freeway.

Display items

- ❒ Information with the mark (*) appears only when the route is set.
- ❒ Depending on the conditions and settings, some items may not be displayed.

Current location

The current location of your vehicle. The tip of the triangular mark indicates your heading and the display moves automatically as you drive.

- ❒ The center of the triangular mark is the current vehicle position.

Destination*

The checker-flag indicates your destination.

Guidance point*

The next guidance point (next turning point, etc.) is shown by a yellow flag.
The guidance points of up to three point ahead including the waypoint are displayed.

waypoint

The checker-flag and number (1 to 5) indicates your waypoint.

(1) Name of the next street to be used*

(2) Distance to the guidance point*

Touching  allows you to hear the information again.

(3) Distance to the destination (or distance to waypoint)*

The distance on this button shows the distance to the destination or to each waypoint. If waypoints are set, the distance to the destination and the next waypoint chage with each touch.

- ❒ When the vehicle position is on the route, the distance to the destination (or waypoint) appears. When the vehicle position is not on the route, the linear distance to the destination (or waypoint) appears.

(4) Name of the street your vehicle is traveling along (or City Name, etc.)

(5) Compass

The red arrow indicates north. If the scale is less than 25 mi (50 km), touching the map changes the direction that it is displayed in (north up/heading up). When the scale of the map is greater than 25 mi (50 km), it is fixed to [north up].

Heading up:
The map display always shows the vehicle's direction as proceeding toward the top of the screen.

North up:
The map display always has north at the top of the screen.

(6) Zoom in/Zoom out

Touch to change the map's scale.

➲ Changing the map's scale ➞ Page 41

(7) Map scale

The scale of the map is indicated by distance.
Changing the map's scale ➞ Page 41

(8) VOICE icon

Touch to change to the voice recognition mode.

- ❒ This is displayed only when the microphone for voice recognition is connected.

➲ The voice operation of the navigation system ➞ Chapter 17

(9) Traffic status

This appears when an XM satellite radio tuner (GEX-P10XMT, sold separately) is connected, and traffic information is received.
TRFC — No problem.
ANTENNA — Improper antenna connection.
UPDATING — Updating encryption code.

➲ "Checking the Reception Status of the XM Tuner" ➞ Page 75

(10) Current time

(11) Estimated time of arrival (or travel time to your destination)*

The display alternates by pressing it.
The estimated time of arrival is automatically calculated from the **Average Speed** set and the actual average speed.

- ❒ The estimated time of arrival is a guideline and may not correspond to the actual time of arrival.

➲ How to set average speed ➞ Page 93

(12) Tracking dot

The tracking dot shows the route your vehicle has traveled by white dots.

➲ Select the tracking setting ➞ Page 45

(13) Map of your surroundings (Side map)
Touching on the map briefly shows the shortcut menu, while touching longer changes the map to the Scroll mode.

➲ Moving the map to the location you want to see → Page 41

(14) Distance to an intersection*
Displayed on the enlarged intersection map. The green bar gets shorter as your vehicle approaches an intersection.

(15) Next direction of travel*
When you approach an intersection, it appears green. The screen displays the distance to the next guidance point, and the next guidance point after that.

(16) Direction line*
The direction towards the location set in (4) is indicated with a straight line.

(17) Lane information*
Lane information is displayed the first time there is a voice guidance on your route. The indications with white arrow on the green plate is the most reccomended lane. If the next traveling direction screen is displayed when you approach a interchange, junction or exit, the lane information disappears.

(18) Freeway signs*
These show the road number and give directional information.

(19) Freeway exit information*
Displays the freeway exit.

(20) Bluetooth Connected icon
This icon is displayed when the cellular phone featuring Bluetooth technology is connected correctly. You can select between display and non-display.



: Connected



: Disconnected

❒ This is available only when the Bluetooth unit (sold separately) is connected.

➲ Selecting display or non-display for the **Bluetooth icon** → Page 46

(21) Mute Voice Guidance icon
Touch to turn on or off the mute setting of Voice Guidance. You can select between display and non-display.

➲ Selecting display or non-display for the **Mute Voice Guidance** icon → Page 46

(22) Second Maneuver Arrow
The turing direction two corners ahead appears. You can select between display and non-display.

➲ Selecting display or non-display for the **Second Maneuver Arrow** → Page 46

(23) POI icon
The POI icon may appear on the enlarged map of the intersection (when available data exists.).

Changing the scale of the map

Touching the [Zoom in/Zoom out] key displayed on the upper right of the screen displays the scale gauge. (When the view mode is set to **Map Mode** or **Guide Mode**, the [Direct scale] key is displayed.) Directly touching the [Direct scale] key changes the map to the selected scale.) Touching or above the scale gauge allows you to specify the scale in greater detail within a range of 25 yards to 1 000 miles (25 meters to 2 000 kilometers).



Direct scale key

❒ The icon of a registered location and the traffic information icons are displayed when the map scale is 10 miles (20 km) or lower.

❒ Traffic line is displayed when the map scal is 1 mile (2 km) or lower.

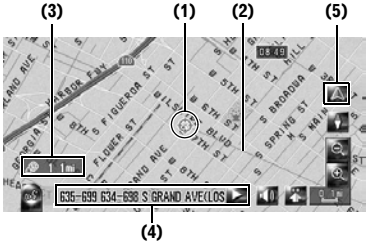
❒ POI icons are displayed when the map scale is 0.75 mile (1 km) or lower.

Scroll the map to the location you want to see

Touching anywhere on the map changes the map to “Scroll mode” and the map begins scrolling in

the direction you touched. The scrolling stops when you release your finger from the screen. Pressing the **MAP** button returns you to the map of your surroundings.
This is the line connecting between the current location and scroll cursor.

- ❒ Touch the area close to the center of the screen to scroll slowly; touch near the sides of the screen to scroll through quickly.
- ❒ During [**Twin Map View**], the map on the left hand side cannot be scrolled. Touch the map on the right hand side to scroll the maps.



(1) Scroll cursor
The position of scroll cursor shows the location selected on the current map.

- ❒ When the scale is 0.25 mi (200 m) or lower, the road appears light blue in the vicinity of the scroll cursor.

(2) Direction line
This is the line connecting between the current location and scroll cursor.
The direction towards the scroll cursor is indicated with a straight line.

(3) Distance from the current location
This shows the distance in a straight line between the location indicated by the scroll cursor and your current location.

(4) The street name, city name, area name and other information for this location.
(The information displayed varies according to the scale.)
Touching on the right displays hidden text.

- ➲ Displaying information on the specified location → Page 42

(5) Current location key
Touching returns you to the map of your current location.

Viewing the information of a specified location

An icon appears at registered places (home location, specific places, address book entries) and places where there is a POI icon or traffic information icon. Place the scroll cursor over the icon to view the detailed information.

1 Scroll the map and move the scroll cursor to the icon you want to view.

2 Touch .



Information for a specified location appears.



The information shown varies according to the location. (There may be no information for that location.)

- ➲ Registering places → Page 59
- ➲ Displaying facilities (POI) icon on the map → Page 47
- ➲ Icons for traffic information → Page 68
- ❒ [**Dial**] becomes active when the Bluetooth unit (sold separately) is connected to the navigation system together with the cellular phone. By touching [**Dial**], you can make a phone call to the displayed phone number.
- ➲ "Dialing from the map" → Page 86

3 Touch [Back].
You can return to the previous display.

4 Touch .
You can return to the map of your surroundings.

- ❒ You can also return to the map of your surroundings by pressing the **MAP** button.

Shortcut menu

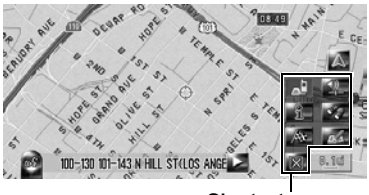
Shortcuts allow you to perform various tasks, such as route calculation for the location indicated by the scroll cursor, or registering a location in [**Address Book**], faster than using the navigation menu.
You can customize the shortcuts displayed onscreen. The shortcuts described here are prepared as default setting.

➲ Changing a shortcut ➞ Page 47

❒ When the Bluetooth unit (Sold separately) is connected to the navigation system, you can display shortcuts related to phone functions.

❒ Items marked with an asterisk (*) cannot be removed from the shortcut menu.

1 When the map is displayed, touch .



Shortcut menu

: Route Options*
Displayed when the map is not scrolled. This item can be selected only during route guidance.
You can add changes to your route and check it.

➲ Searching for another route ➞ Page 32
➲ Checking the route ➞ Page 33
➲ Canceling the route guidance ➞ Page 31
➲ Skipping a waypoint ➞ Page 35

: Destination*
Displayed when the map is scrolled. Set the route to the place specified with the scroll cursor.

➲ To check the location at the map ➞ Page 29

: Registration
Registers the location indicated by the scroll cursor to **Address Book**.

❒ Touching [**Registration**] and selecting [**OK**] allow you to register the location to Address Book.

➲ How to edit a registered location ➞ Page 61

: Vicinity Search
You select a location with the scroll cursor. Nearby POIs (Points Of Interest) will also be found.

➲ Searching for the facilities surrounding a certain place ➞ Page 53

: Overlay POI
You can select the icon of the facilities to be displayed on the map.

➲ Displaying Certain Facilities on the Map ➞ Page 47

: Volume
On the Volume Settings screen, you can adjust the guidance volume or the cellular phone volume.

➲ Volume ➞ Page 91

: BT telephone Book
You can display the telephone book transferred to the navigation system.

➲ Telephone Book ➞ Page 88

: Menu Close
Hides the shortcut menu.

Modifying Map Configurations

⚠ CAUTION

- **For safety reasons, these functions are not available while your vehicle is in motion. To enable these functions, you must stop in a safe place and put on the parking brake before setting your route (see page 18 Interlock for details).**

Entering the Map Menu

1 Press the MENU button to display the navigation menu.

2 Touch [Map] to display the Map menu.

3 Change the setting.

➲ Adjusting each item ➞ Page 45 to 46

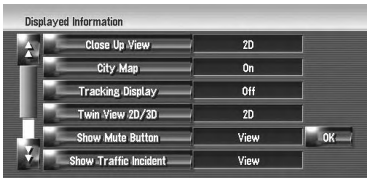
❒ This section describes the details of the setting for each item. Settings marked with an asterisk (*) show that they are default or factory settings.

Setting the Item on the Map Screen

You can select whether to display or hide the icon on the map or how to display the map.

1 Touch [Map] in the navigation menu, then touch [Displayed Info].

The Displayed Info screen appears.



On this screen, you can operate the following items.

2 To finish the setting, touch [OK].

Close Up View

You can select the method to display the close up view of the intersection.

2D*:

Displays the close up view with the 2D map.

3D:

Displays the close up view with [**Driver's View**].

Off:

Do not display the close up view.

City Map

You can select whether to display or not the city map when in certain metropolitan city areas.

On*:

Automatically switches to the city map when in a city map area.

Off:

Do not show the city map.

❒ Even if you switch [**City Map**] to [**On**], city map cannot display in the area where there is no city map data.

Tracking Display

You can display the trace of your passing with white dots on the route.



On (Always):

Display tracking for all journeys.

On (This journey):

Display tracking dots but erase them when the navigation system is turned off (when turning off the engine of your vehicle).

Off*:

Do not display tracking dots.

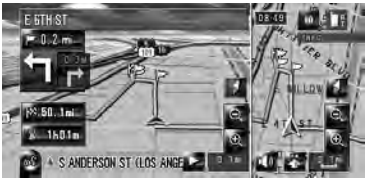
Twin View 2D/3D

You can select whether to display the left map screen of the Twin Map View in 2D or in 3D.

2D*:
Displays the 2D map.



3D:
Displays the 3D map.



Show Mute Button
Selects whether to display or hide the voice guidance mute key on the map.



View*:
Displays the voice guidance mute on the map.
Hide:
Hides the voice guidance mute key from the map.

Show Traffic Incident
Selects whether to display or hide the traffic notification icon on the map when incidents are on your route.
➲ "Checking traffic information manually" ➞ Page 70
View*:
Displays the icon on the map.
Hide:
Hides the icon on the map.

Second Maneuver Arrow
Selects whether to display or hide the second corner ahead of the vehicle on the map (except for [Route View]).
➲ About Second Maneuver Arrow ➞ Page 41
View*:
Displays the second corner ahead of the vehicle on the map.
Hide:
Hides the second corner ahead of the vehicle on the map.

Bluetooth Connected
Selects whether to display or hide the icon for current status of the phone connection via Bluetooth wireless technorogy.
View*:
Displays the icon on the map.
Hide:
Hides the icon on the map.

Selecting the Shortcut

Select shortcuts to display on the map screen. In the list displayed onscreen, the items with red checks are displayed on the map screen. Touch the shortcut you want to display and then touch [**OK**] when a red check appears. You can select up to five shortcuts.

1 Touch [Map] in the navigation menu, then touch [Short-Cut Selection].

The Short-Cut Selection screen appears.



On this screen, you can operate the following items.

2 Touch the item which you want to set in the shortcut menu.

The item with a red check mark is displayed in the shortcut menu.

: Registration*

Register to the Address Book information on the location indicated by the scroll cursor.

➲ Register to Address Book → Page 60

: Vicinity Search*

Find POIs (Points Of Interest) in the vicinity of the scroll cursor.

➲ Searching the facilities surrounding a certain place → Page 51

: Overlay POI*

Displays icon for surrounding facilities (POI) on the map.

➲ Viewing POI information → Page 42

: Volume*

Display [**Volume Setting**].

➲ Volume → Page 91

: Phone Book*

Displays [**Phone Book**].

➲ "Editing the Phone Book data" → Page 88

: Dial Favorite 1 to 5

You can make a call to the phone number registered in [**Dial Favorite**].

➲ "Registering a phone number in Dial Favorite" → Page 87

: Whole Route Overview

Displays the entire route (currently set).

➲ Checking the whole route overview → Page 33

: Stock Info

Displays stock prices.

➲ Displaying share prices → Page 73

: Browse

Displays XM tuner browsable information.

➲ Displaying browsable information → Page 74

: My Favorites

Displays information on your favorite browsable item for XM tuner.

➲ Displaying favorite browsable information → Page 74

: Traffic On Route

Displaying a list of traffic information on the route.

➲ Displaying traffic information on the route → Page 68

: Traffic Events

Displaying a list of traffic events information.

: Day/Night Display

Switches Day/Night Display setting.

3 To finish the setting, touch [OK].

Displaying POI on the Map

Displays on the map the icon for surrounding facilities (POI).

1 Touch [Map] in the navigation menu, then touch [Overlay POI].

2 Touch [Display] to turn it [On].

❒ If you do not want to display the POI icon on the map, touch [**Display**] to turn it [**Off**]. (Even if [**Display**] is turned [**Off**], the POI selection setting is retained.)

3 Touch the category you want to display.

4 Touch [Select Detail].



[Select All]:
Selects all detailed categories that are included in that category. (E.g. all categories of restaurants including Japanese and fast food.)
[Deselect All]:
Deselects the selected category.

5 Touch the desired detailed category.

❒ You can select up to 100 items from the detailed category.



The category already set will have a red check mark.

6 To finish the selection, touch [OK].

➲ Viewing POI information ➞ Page 42

Browsing the Map Color Explanation

You can browse the type of the roads and areas displayed on the map.

1 Touch [Map] in the navigation menu, then touch [Map Legend].

2 Touch the type which you want to see.



3 Touch ▲ or ▼ to switch to the next page or previous page.



On this screen, you can operate the following items.
Day:
You can check the color of the Day screen.
Night:
You can check the color of the Night screen.

❒ To return the previous screen, touch [**Back**].

About “Roads without turn by-turn instructions”

Routable roads (The route displayed and highlighted in purple color) have only basic data and can only be used to plot a navigable route. Pioneer Navigation will only display a navigable route on the map (only the arrival guidance for the destination or a waypoint is available). Please review and obey all local traffic rules along the highlighted route. (For your safety.)
No turn-by-turn directions or arrow icons will be displayed on these roads.
When your vehicle reaches to the entrance of this road, the icon will be displayed, indicating that the guidance is not available with this type of road. The icon will be indicated for the road with which the guidance is available.
The Close-up of intersection function, Auto Reroute function, Changing the view to Guide View, or Route View are not available.

Changing the View Mode for the Navigation Map

You can change the map display mode.

1 Touch [Map] in the navigation menu, then touch [View Mode].

2 Touch the type which you want to set.

➲ How to Use the Map ➞ Page 37

Setting the Map Color Change between Day and Night

To improve the visibility of the map during the evening, you can set the timing to change the combination of the map color.

1 Touch [Map] in the navigation menu.

2 Touch [Day/Night Display] to change the setting.

Each time you touch the key changes that setting.

Automatic*:

You can change the colors of a map between daytime and nighttime according to whether the vehicle lights are On or Off.

Day:

The map is always displayed with daytime colors.

❒ To use this function with [**Automatic**], the Orange/white lead of the navigation system must be connected correctly.

Changing the Setting of Navigation Interrupting Screen

Setting whether or not to switch to the navigation screen automatically when your vehicle approaches a guidance point such as an intersection while displaying a screen other than navigation.

1 Touch [Map] in the navigation menu.

2 Touch [AV Guide Mode] to change the setting.

Each time you touch the key changes that setting.

On*:

Switching from audio operation screen to navigation screen.

Off:

Screen is not switched.

Changing the Map Color

You can set the map color to bluish or reddish.

1 Touch [Map] in the navigation menu.

2 Touch [Road Color] to change the setting.

Each time you touch the key changes that setting.

Blue*:

Changes the map color to bluish.

Red:

Changes the map color to reddish.

❒ Check the color change with the [**Map Legend**].

Setting a Route to Your Destination

⚠ CAUTION

- **For safety reasons, these route-setting functions are not available while your vehicle is in motion. To enable these functions, you must stop in a safe place and put on the parking brake before setting your route. (see page 18 Interlock for details).**

❒ Some information on traffic regulations depends on the time when the route calculation is performed. Thus, the information may not correspond with a certain traffic regulation when your vehicle actually passes the location. Also, the information on the traffic regulations provided will be for a passenger vehicle, and not for a truck or other delivery vehicles. Always follow the actual traffic regulations when driving.

Searching for Points of Interest (POI)

Information about various facilities (Points Of Interest - POI), such as gas stations, amusement parks or restaurants, is available. By entering the POI Name, you can search for a POI.

❒ You can also narrow down the search range by initially specifying the name of the city where your destination is located and also by initially specifying the category.

❒ Use the functions [**POI Search**] and [**Vicinity Search**] in different situations. In [**POI Search**], the distance is not limited, but in [**Vicinity Search**], the distance for the search is limited to within a 16 km (10 mile) radius.

Searching for Points of Interest (POI)

The following three methods are available for searching facilities by POI:

- Searching for POIs by specifying a category first
- Searching for POIs by specifying a city name first
- Searching a POI from a name of the facilities directly

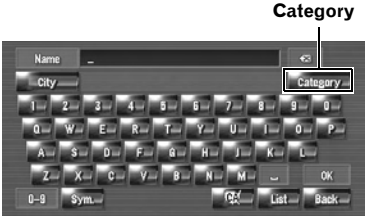
Searching for POIs by specifying a category first

1 Touch [Destination] in the navigation menu, and then touch [POI Search].

2 Touch the state code key of the destination and select the state or province (or territory).

➲ Selecting the state where you want to search ➞ Page 26

3 Touch [Category].



4 Touch the desired category.

POI's are divided into several categories.



If the category is not sub-divided into more detailed categories, the list will not be displayed. Proceed to Step 6.

[Name] :

Touch if you want to first specify the POI name.

[City] :

Touch if you want to first specify the destination city or area.

[Back]:
Return the Destination menu.

5 Touch the detailed category.

6 Input the name of the facilities.



[City] :
Touch to specify the destination city or area, and then input the city name. (This is available only when [**Name**] is blank.)
[List]:
Lists candidate based on yellow characters in the text box (suggested character in white is invalid). Touch the desired facility in the list to proceed to the next step.

- ❒ When the options are narrowed down to six or less, a list of the matched facilities automatically appears.
  When you enter the same characters as those entered previously, the system automatically displays the character string that follows the entered characters. (Auto fill-in function.)
- ➲ Auto fill-in function ➞ Page 27
- ❒ If less than six POIs in a detailed category are registered, the screen for inputting the POI name is not displayed. Please proceed to Step 7.

7 Touch Dist..

Touching Dist. sorts the items in the list in the order of distance.



Searching range is approximately 10 miles (16 km) square from the current location.

A–Z :
Sorts the items in the list in the alphabetical order.

- ❒ You can use this sort function only when the candidates are less than 2000.

8 Touch desired POI for your destination.



The “Location confirmation screen” appears.

- ➲ Calculating the route to the destination ➞ Page 29
- ❒ Touching displays a map of the surroundings of the selected POI.
- ❒ If the selected POI is the name of a chain of outlets and consequently the same store name applies to different locations (the number of outlets appears next to the chain's name), touch the name of the POI to display a list of those POIs with city name and street name, touch to set the POI as your destination.

Searching for POIs by specifying a city name

1 Touch [Destination] in the navigation menu, and then touch [POI Search].

2 Touch the state code key of the destination and touch [OK].

- ➲ Selecting the zone where you want to search ➞ Page 26

3 Touch [City].

4 Input the name of the city that has the facility you want to search.



- ❒ Auto fill-in function is available.
- ➲ Auto fill-in function ➞ Page 27

A list of cities that include the entered character appears.

[List]:

Lists candidate based on yellow characters in the text box (suggested character in white is invalid). Touch the desired city in the list to proceed to the next step.

5 Input the name of the facilities.

You can also narrow down the candidates by specifying the category before the name input.

➲ Subsequent Operations ➞ Page 52 (Step 6 to 8)

Searching a POI from a name of the facilities directly

1 Touch [Destination] in the navigation menu, and then touch [POI Search].

2 Touch the state code key of the destination and touch [OK].

➲ Selecting the zone where you want to search ➞ Page 26

3 Input the name of the facilities.



❒ Auto fill-in function is available.

➲ Auto fill-in function ➞ Page 27

A list of the facilities that include the entered character appears.

[List]:

Lists candidate based on yellow characters in the text box (suggested character in white is invalid). Touch the desired facility in the list to proceed to the next step.

4 Touch the facility from the list.



❒ Icons are helpful for quickly telling the category of facities with the same name.

➲ Subsequent Operations ➞ Page 52 (Step 7 and 8)

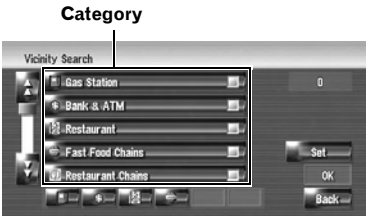
Finding a POI in your surroundings

You can search for Points Of Interest in your surroundings. Use it to find a POI to visit during a journey. Searching range is approximately 10 miles (16 km) square from the current location.

1 Touch [Destination] in the navigation menu, and then touch [Vicinity Search].

The list of POI categories appears.

2 Touch the desired category.



The category already set will have a red check mark. When only a few types of the detailed categories are selected, blue check marks will appear.

[OK] :

Start search with the selected category.

[Back] :

Returns to the previous screen.

[Set] :

Display the screen for registering POI shortcuts.

➲ Register POI shortcut ➞ Page 56

❒ If you touch one of the POI shortcuts (e.g. $) before selecting category on the list, you can start searching for facilities directly by the category registered on the POI shortcut.

❒ If you want to search for facilities by using both marked category and POI shortcut, select some categories in the list and then touch the POI shortcut to start searching.

3 Touch [Select Detail].



[Select All]:
Selects all detailed categories that are included in that category. (E.g. all categories of restaurants including Japanese and fast food)
[Deselect All]:
Deselects the selected category.

4 Touch the desired detailed category.



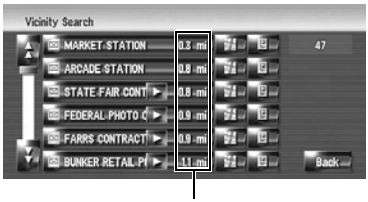
The category already set will have a red check mark.

5 Touch [Back].
Returns previous screen.

6 Repeat Step 2 to 5 to select a category, and touch [OK].
The POI in the selected category or subcategory is searched.

❒ You can select from the detailed category up to 100 items.

7 Touch [OK].
Names of POIs and their distance from your current location appear. They are listed in order from nearest to farthest. To the left of each item is an icon indicating the category.



Distance to the facility

8 Touch desired POI for your destination.
The "Location confirmation screen" appears.

➲ Calculating the route to the destination → Page 29

❒ When you touch , the POIs around the specified location are shown on a map.

➲ Searching the destination by map → Page 43

Searching for the facilities around the scroll cursor

Searching range is approximately 10 miles (16 km) square from the scroll cursor.

1 Scroll the map and move the scroll cursor to the place where you want to search for POI.

2 Touch .
The shortcut menu appears.

3 Touch .
See Step 2 of [Finding a POI in your surroundings] for the following operations.

➲ Finding a POI in your surroundings → Page 53

❒ This can be used when **Vicinity Search** is selected in **Short-Cut Selection**.

➲ Changing Shortcut → Page 47

❒ The distance indicated in the search result is the distance from the scroll cursor to the facility.

❒ The bottom icon is for shortcuts to your favorite categories. Touching the shortcuts icon displays a list of the facilities in a category.

❒ [**Vicinity Search**] in the navigation menu searches your surroundings. On the other hand, in the case of  in the Shortcut menu (→ Page 43), the area around the scroll cursor after the map is scrolled will be searched.

Searching for Your Destination by Specifying the Telephone Number

If you know the telephone number of your destination, you can quickly search for your destination by specifying the telephone number.

❒ You can also search for the phone number [**Phone #**] on [**Address Book**].

1 Touch [Destination] in the navigation menu, and then touch [Telephone Search].

The telephone number entry screen appears.

2 Input a telephone number.



The “Location confirmation screen” appears.

➲ Calculating the route to the destination → Page 29

❒ If there is more than one place for the number input, a list of those places is displayed. Touch the item you want in the list.

Route Calculation to Your Home Location or to Your Favorite Location

If your home location is registered, the route home can be calculated by a single touch of the touch key from the navigation menu. Also, you can register one location, such as your workplace, as your favorite location, and the route is calculated in a similar way.

➲ “Registering your home and your favorite location” → Page 59

1 Touch [Destination] in the navigation menu, and then touch [Return Home] or [Go to].

Selecting Destination from the Destination History and Address Book

Any place that has been searched before is stored in [**Destination History**]. Places that you have registered manually, such as your home, are stored in [**Address Book**]. Simply select the place you want to go to from the list and a route to that place will be calculated.

➲ For information on **Address Book** → Page 60

➲ For information on **Destination History** → Page 65

1 Touch [Destination] in the navigation menu, and then touch [Address Book] or [Destination History].

2 Touch your destination name.



The “Location confirmation screen” appears.

➲ Calculating the route to the destination → Page 29

❒ You can also see the destination by touching on the right of the list.

➲ Searching the destination with map → Page 43

Registering/deleting POI Shortcuts

You can register up to six shortcuts to your favorite POI. You can also change or delete the registered shortcuts.

Registering a POI shortcut

1 Touch [Destination] in the navigation menu, and then touch [Vicinity Search].

2 Touch [Set].



Displays a list of already registered POI shortcuts.

3 Touch [Add].



Displays a POI category list.

4 Touch category.



5 Touch the POI selection method.



➲ Subsequent operations ➞ Page 54

Touching a category adds that category to the shortcuts.

❒ You can register a POI shortcut by touching  on the map. The registering steps are the same as described above.

Deleting a POI shortcut

1 Touch [Destination] in the navigation menu, and then touch [Vicinity Search].

❒ You can also touch  in the shortcut menu.

2 Touch [Set].

3 Touch [Delete].

Displays a list of already registered POI shortcuts.

4 Touch the category to be deleted.

A red check appears on the selected shortcut.

All (None):

A red check will appear or disappear on all registered categories.

5 Touch [Delete].

Deletes the selected shortcut from the list.

Registering and Editing Locations

⚠ CAUTION

- **For safety reasons, these functions are not available while your vehicle is in motion. To enable these functions, you must stop in a safe place and put on the parking brake before setting your route (see page 18 Interlock for details).**

Registering Locations Overview

Registering places you visit frequently saves time and effort. Also, routes to registered locations can be calculated easily by touching the correspond touch key. This registered location information can also be modified.

The registered locations are categorized into the following three types:

- : **Home location**:
  Register your home location here. Once your home location is registered, the route to your home can be set by simply touching [**Return Home**] in the Destination menu. Only one location can be registered.
- : **Favorite location**:
  Register here the point that you frequently visit (for example, your office). Once your favorite location is registered, route to your favorite location can be set by simply touching [**Go to**] in the Destination menu. Only one location can be registered.
- : (default): **Address Book entry**:
  Register here other points you often visit. Once locations are registered, you can set the route by selecting an item from **Address Book**.

❒ The items in **Address Book** are automatically updated in alphabetic order. However, [**Home location**] and [**Favorite location**] always appear at the top (if you registered them).

Registering your home and your favorite location

You can register one home location and one favorite location. You can change the registered information later. You might find it useful to register your workplace or a relative's home as your favorite location.

1 Touch [Settings] in the navigation menu, then touch [Defined Locations].

2 Touch [Go to].
When registering your home location, touch [**Home**].



3 Search for a location to register.
You can select a method of location search.



➲ Address Search → Page 26

➲ Information on searching locations to register → Page 51 to 56

❒ If you select [**Map Search**], move the scroll cursor to the place you want to set and touch [**OK**].

4 Point the scroll cursor to the location you want to register and touch [OK].
The location is registered, and the Edit registered information screen appears.

➲ "Editing a location's information" → Page 61

5 Touch [OK].
Completes the registration.

Registering location into Address Book

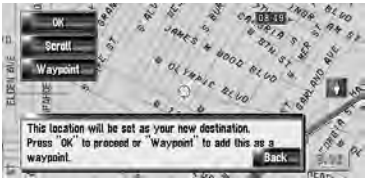
The **Address Book** can store up to 400 registered locations. These can include home location, favorite places, and destinations you have already registered.

Registering location by scroll mode

1 From Shortcut Selection, select Registration.

➲ Short-cut Selection ➞ Page 47

2 Search for the location, and touch [Scroll].
The scroll mode is established.





❒ When you want to register the location after you move to another location, touch the screen to scroll the map, and place the cursor on the point you want to register.

3 Display the shortcut menu, and touch .



The location is registered, and the Edit registered information screen appears.

➲ "Editing a location's information" ➞ Page 61

4 Touch [OK].
Completes the registration.

Registering location by Address Book

1 Touch [Address Book] in the Destination menu.

2 Touch [Add].



3 Select the search method, search the location, and display the map.



4 When the map of the location you want to register is displayed, touch [OK].



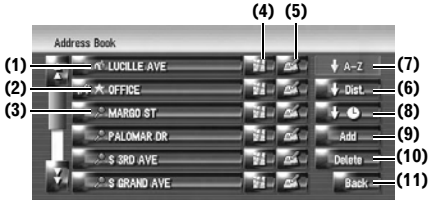
The location is registered, and the Edit registered information screen appears.

➲ "Editing a location's information" ➞ Page 61

5 Touch [OK].
Completes the registration.

The viewpoint of the Address Book

1 Touch [Destination] in the navigation menu, then touch [Address Book].



(1) Home location:

The item displayed with icon is the home location. When you touch this, the route is calculated, and the route guidance screen appears.

➲ "Checking and fixing the route" ➞ Page 30

➲ "Registering your home and your favorite location" ➞ Page 59

(2) Favorite location:

The item displayed with icon is the favorite location. When you touch this, the route is calculated, and the route guidance screen appears.

➲ "Checking and fixing the route" ➞ Page 30

➲ "Registering your home and your favorite location" ➞ Page 59

(3) Address Book entry:

When you touch this, the route is calculated, and the route guidance screen appears.

➲ "Checking and fixing the route" ➞ Page 30

(4) :

The map of that location can be displayed.

➲ "Calculating the route to the destination" ➞ Page 29

(5) :

The information related to that place can be edited.

➲ "Editing a registered location's information" ➞ Page 61

(6) Dist. :

Sorts the items in the list in order of the distance from the vehicle position.

❒ Active if the list item number is not equal to 0 and current sort is not by distance form current position.

(7) A-Z :

It is the default sorting order.

❒ Active if the list item number is not equal to 0 and current sort is not by alphabetically.

(8) :

Sorts the items in the list in order of the recently used items.

❒ Active if the List item number is not equal to 0 and current sort is not by last used.

(9) [Add]:

The screen for selecting the method for registering the location in **Address Book** appears.

➲ "Registering location by Address Book"➞ Page 60

(10) [Delete]:

Deletes the registered locations.

➲ "Deleting Address Book information" ➞ Page 64

(11) [Back]:

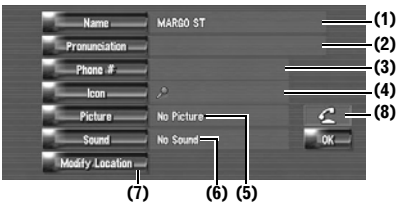
Returns previous screen.

Editing a registered location's information

In the Address Book menu, touching on the right-hand side of the place displays the Edit registered information screen.

1 Touch [Destination] in the navigation menu, then touch [Address Book].

2 Touch on the right-hand side of the location whose information you want to edit.



(1) Name
You can enter the desired name.
(2) Pronunciation
You can enter the desired pronunciation independently from the name. The registered pronunciation is used for voice recognition.
➲ Information on voice operation → Chapter 17
❒ When you switch the language of the navigation system, the registered pronunciations cannot be used for voice recognition.
(3) Phone #
The phone number of the registered location. You can dial this number by using (8).
❒ You can search by registered telephone number.
(4) Icon
The symbol displayed on the map and Address Book.
(5) Picture
As you approach the location, the registered image appears.
You can register the picture stored in the navigation system. You can also import and register a picture shot from a digital camera etc., by using a CD-ROM.
(6) Sound
The selected operating sound is played.
(7) Modify Location
You can change the registered location by scrolling the map.
(8) Dial
Only when the Bluetooth unit is connected to the navigation system and the cellular phone featuring Bluetooth technology is also connected, you can make a phone call to the registered phone number (3) by touching [**Dial**].
➲ "Dialing the entry in the Address Book" → Page 86

When you approach the registered location while travelling
When the location with a sound effect and an image are registered comes into approx. 0.19 miles (300 m) radius from the vehicle position, the sound effect plays and the image appears.



❒ If there are multiple locations with a registered sound effect within approx. 0.19 miles (300 m) radius, then only the closest one will play.

Changing a name

1 Touch [Name], then touch [Yes].
The message confirming whether or not to register the entered name as voice command is displayed.
Alternative option:
No:
When not registering a name as a voice command, select [**No**].

2 Enter a new name, then touch [OK].
The current name appears in the text box. Delete the current name, and enter a new name between 1 and 22 characters long.

3 If the pronunciation is suitable, touch [Yes].
The details you set are registered, and the Address Book menu appears.
Alternative options:
No:
Jump to the pronunciation input screen.
Repeat:
You can reconfirm the pronunciation of the name you entered.

No sounds can be output during .

❒ When you confirm the pronunciation, is shown on the left side of the location name displayed in "Address Book menu". This icon indicates that this name can be used as a voice command during voice operation.
❒ You cannot change the name of your home.

Changing a pronunciation

1 Touch [Pronunciation], then touch [Yes].

2 Enter a new pronunciation, then touch [OK].
The current name appears in the text box (when available). Delete the current name, and enter a new name between 1 and 22 characters long.

3 If the pronunciation is suitable, touch [Yes].
The details you set are registered, and the Address Book menu appears.
Alternative options:
No:
Jump to the pronunciation input screen.
Repeat:
You can reconfirm the pronunciation of the name you entered.

No sounds can be output during  .

- ❒ When you confirm the pronunciation,  is shown on the left side of the location name displayed in the Address Book menu. This mark indicates that this name can be used as a voice command during voice operation.
- ❒ You cannot change the name of your home.
- ❒ If nothing is entered in the text box, you cannot use that item as the voice commands.

Entering or changing a phone number

1 Touch [Phone #].

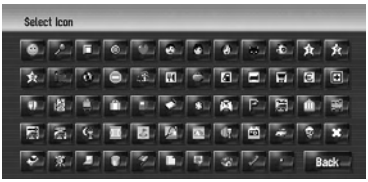
2 Input a phone number, then touch [OK].
The Address Information menu appears.

- ❒ To change a registered phone number, delete the existing number and then enter a new one.

Selecting an icon to appear on the map

1 Touch [Icon].

2 Touch the desired icon to appear on the map.



The Address Information menu appears.

- ❒ You cannot change the icon of your home or of your favorite location.

Customizing the picture

Be sure to read “Limitations for import the picture” before creating the CD-R (-RW).

➲ “Limitations for import the picture” ➞ Page 97

You can customize a picture for the registered point. Some pictures are already stored in the hard disk drive, and you can also import JPEG format pictures, such as a picture on your digital camera by using CD-R(-RW). If you burn the pictures into a CD-R (-RW) by your PC and insert that to the navigation system, you can use them.

Here, a method for changing the picture is described with an example of loading a picture stored on a CD-R (-RW) onto the navigation system.

1 Check that no disc is inserted, and insert your CD-R (-RW) to the disc loading slot.

2 Touch [Picture], and then touch [Import from Disc].
The list of the pictures stored in a CD-R (-RW) is displayed.
On this screen, you can select the following item:
Back to Original:
The picture originally used when the system was purchased is selected.

❒ Touching other than [Import from Disc] allows you to select an image stored on the hard disk drive.

3 Touch a picture you want to set.

4 Touch [Yes].
On this screen, you can select the following items:
No:
This is selected when you want to change to another picture. Return to Step 3.

Selecting sound

1 Touch [Sound].

2 Select the desired sound.
❒ To turn off the sound, select [**No Sound**].

3 Touch [Sound] to hear the sound.

4 Touch [Set].

No sounds can be output during .

Changing the position of locations

1 Touch [Modify Location].
The map of the selected area and its surroundings appears.

2 Touch the screen to change its position, then touch [OK].



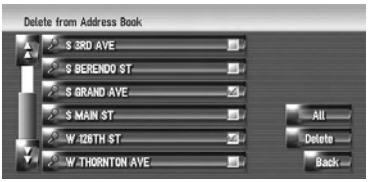
Deleting Address Book information

Items registered in the **Address Book** can be deleted. All entries of the data in the **Address Book** can be deleted at once.

1 Touch [Destination] in the navigation menu, then touch [Address Book].

2 Touch [Delete].
“Address Book Delete screen” appears. (or “Destination Delete screen” appears.)

3 Select the location you want to delete.
A check mark appears by the selected location.



On this screen, you can select the following items:
All:
Selects all locations.
None:
Displayed when all locations are being selected. Cancels all selected locations.

4 Touch [Delete].

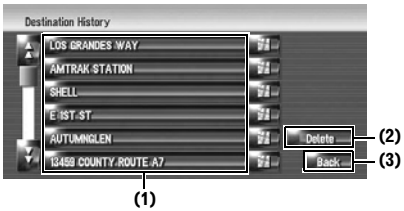
5 Select [Yes].
The data you selected is deleted.
Alternative option:
No:
The display shown in Step 4 appears.
❒ Because deleted data cannot be restored, take extra care not to delete by mistake.

Destination History Operations

The points to which route has been calculated in the past are automatically saved in **Destination History**.

❒ If no location is stored in Destination History, you cannot select [**Destination History**]. (If you perform a route calculation, you can select [**Destination History**].)

1 Touch [Destination] in the navigation menu, then touch [Destination History].



(1) Destination history:
Touch to calculate the route. The route guidance screen appears.

➲ "Checking and fixing the route" ➞ Page 30

(2) [Delete]:
Deletes the registered location.

➲ "Deleting Address Book information" ➞ Page 64

(3) [Back]:
Returns previous screen.

Using XM NavTraffic Information

If you have a GEX-P10XMT XM Digital Satellite Data & Audio Receiver (sold separately) attached to the navigation system, and have an active subscription to XM NavTraffic service, you can view current traffic conditions and information on your navigation display. When the unit receives updated traffic information, the navigation system will overlay the traffic information on your map, and also display detailed text information when available. When you are traveling along a route and there is traffic information on your current route, the system will detect it, and ask you if you would like to be rerouted, or suggest another route automatically.

- ❒ The system acquires the traffic information in the range between 20 miles and 100 miles in diameter from the vehicle position. (According to the amount of traffic information acquired at the same time, the reception range is automatically adjusted in the range between 20 miles and 100 miles with your vehicle at the center.)
- ❒ The navigation system provides the following functions by using the information from XM NavTraffic:
  - Displaying a list of traffic information
  - Displaying traffic information on a map
  - Suggesting a route to avoide traffic congestion by using traffic information
- ❒ The term “traffic congestion” in this section indicates the following types of traffic information: stop and go, stopped traffic, closed/blocked roads. This information is always taken into consideration when checking your route, and the information related with these events cannot be turned off. If you select other traffic information in [**Traffic Settings**], the information can be displayed in a list or on a map.

➲ “Selecting traffic information to display” ➞ Page 70

Viewing traffic list

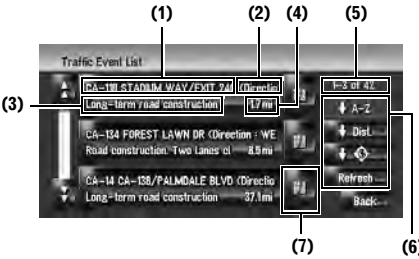
Traffic Information is displayed onscreen in a list. This allows you to check how many traffic incidents have occurred, their location, and their distance from your current position.

Checking traffic information

Traffic information except traffic flow information is displayed onscreen in a list.

1 Touch [Information] in the navigation menu, then touch [Traffic Events].
The list with received traffic information is shown.

2 Touch ▽ or △ to view the incident list.
Places (street names) where incidents have occurred are displayed in the list.



(1) Street or place
(2) Direction
(3) Incident
(4) Distance to the location
(5) The incident numbers currently displayed and the total number of incidents

- ❒ The incidents that have already been read will be displayed in white. Unread incidents will be in yellow.

(6) Sort key

A-Z **:**
You can sort the traffic information in alphabetical order.

Dist. **:**
You can sort the traffic information by distance from your current position.

For the list displayed when you touch [**Traffic Events**], the list will be sorted according to the linear distance from the vehicle position to the traffic information.
For the list displayed when you touch [**Traffic On Route**], the list will be sorted according to the distance from the vehicle position to the traffic information.

:
You can sort the traffic information according to the incident.
The list will be sorted in the order of closed/blocked roads, traffic congestion, accidents, road works, and others.

Refresh :
When new traffic information is received, current information is changed, or old information has been removed, the list is updated to reflect the new situation.

(7)
Touching allows you to check the location on a map. (Traffic information without positional information cannot be checked on a map.)

3 Select an incident you want to view in detail.
The details of the selected incident are displayed.

- Touching an incident you want to see allows you to view the detailed information of the incident. If the information cannot be displayed on one screen, touch or to view the remaining information.

4 Touch [Back] to return to the list with traffic information.
A list with traffic information appears again.

Checking traffic information on the route

All traffic information on the current route (including traffic flow information) is displayed onscreen in a list.

1 Touch [Information] in the navigation menu, and then touch [Traffic On Route].
The currently set traffic information on the route appears on screen.

❒ The method for checking the content displayed on the screen is the same for "Checking traffic information".

Checking traffic flow information on the list

The traffic flow information on the route can also be displayed as an onscreen list.

1 Touch [Information] in the navigation menu, then touch [Traffic Flow].
The list with the traffic flow information is shown.

mph (mph):
You can sort the traffic information by the average speed.

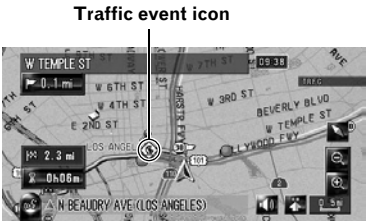
❒ The other methods for checking the traffic flow information displayed on screen is the same for "Checking traffic information".

Confirming traffic information on the map

❒ A line displayed only when the map scale is 2.5 mile (5 km) or lower.
❒ Icon appears only when the scale on the map is 10 mi (20 km) or lower. (If the scale is 1 mi (2 km) or higher, the icons are resized smaller.)
❒ Traffic-related items are not displayed on "City Map".

Traffic event icon and line

The traffic event information displayed on the map is as follows.



with yellow line:
Stop and go traffic

with red line:
Stopped traffic

with black line:
Closed/blocked roads

etc.:
For the meaning of the icon, see [**Traffic Settings**] in the Information menu.

➲ "Selecting traffic information to display" ➞ Page 70

If you want to check the traffic information details at the map, move the scroll cursor onto an icon such as and touch . This allows you to view place names and other detail information.

Traffic flow information icon and line

Red, yellow, or green blinking lines may appear on either side of a road. In addition to these blinking lines, a round icon with a number may appear on the map. The number in the icon indicates the actual average speed of that specific area. These colors indicate the average speed at which traffic is flowing along these streets. Here is a guide to the colors and the average speed they indicate:



Red: average speed in this area is between 5 mph to 15 mph (8 km/h to 24 km/h)
Yellow: average speed in this area is between 20 mph to 40 mph (32 km/h to 64 km/h)
Green: average speed in this area is 45 mph (72 km/h) or faster (An icon without a number indicates the average speed of the road is more than 45 mph (72km/h))

❒ The traffic flow line can be used only when [**Traffic Settings**] is selected.

➲ "Selecting traffic information to display" ➞ Page 70

If you want to check the traffic information details at the map, move the scroll cursor onto an icon such as and touch . This allows you to view place names and other detail information.

Setting alternative route to avoid traffic congestion

The navigation system checks at certain time intervals whether or not there is the traffic information on your route. If the navigation system detects any traffic congestion on your current route, the system tries to find a better route in the background.

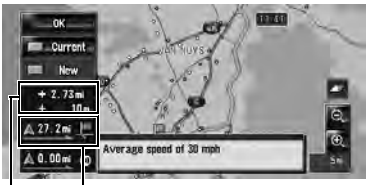
❒ Following types of traffic incidents on the route will be checked: stop and go, stopped traffic and closed/blocked roads.

❒ The traffic flow information is taken into account when the traffic flow is not selected in [**Traffic Settings**].

Checking traffic congestion automatically

If there is information of traffic congestion on your current route and if an alternative route can be found, the navigation system will recommend you new alternative route automatically. In such case, the following screen will appear.

❒ There is no action if the system cannot find any traffic congestion information on your route or the system cannot find an alternative.



Distance from the current position of your vehicle to the point of entry into the new route.

Difference in distance and travel time between existing route and new route.

On this screen, you can select the following items:

New:
The recommended route is displayed on the screen.

Current:
The current route is displayed on the screen.

OK:
The displayed route is set.

❒ When no selection is made, the current route will be automatically selected after a short while.

Checking traffic information manually

Touching notification icon on the map screen allows you to check traffic information on your route while icon is displayed. Only if there is any traffic information on your route, notification icon is displayed on the navigation map screen.

- ❒ Notification icon will not appear when your vehicle deviate from route.
- ❒ Traffic flow information is not taken into account if [**Traffic Flow**] in [**Traffic Settings**] is not checked.

1 Set [Show Traffic Incidents] to [View].

➲ Displayed Information➞ Page 68

2 Press the MAP button to display the current location.

The icon appears when the system acquires traffic information on the current route.

3 Touch icon during the icon is displayed.

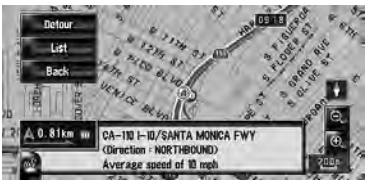
Notification icon



The displayed icon indicates the type of the traffic information.

4 Touch [Detour] to search alternative route.

- ❒ Only if the system can find the information related traffic congestion, [Detour] will be enable.



After touching [**Detour**], the route is recalculated taking all traffic congestion on your current route into account.

- ❒ The traffic information displayed on the notification icon is the traffic information on the route closest to the vehicle position. If you touch [**Detour**], the route is recalculated by taking into account not only this information, but also all traffic congestion information on the route.

On this screen, you can select the following items:

List:

Only the three most recent events are listed for the traffic information on your route.

Back:

The message disappears, and the map display reappears.

For the subsequent operations, see “Checking traffic congestion automatically”.

➲ “Confirming traffic information on the map” ➞ Page 68

Selecting traffic information to display

There are different types of traffic information that can be received via the XM NavTraffic service, and you can select which types will be incorporated and displayed on your navigation system.

1 Touch [Information] in the navigation menu, and then touch [Traffic Settings].

2 Touch [Displayed traffic information].

The names of the displayed traffic information items and a list of icons appears on the screen.



3 Touch the traffic information item to display.

A red check appears next to the selected traffic information.



- ❒ [**Flow Info**] includes not only whether or not to display the icon on the map, but also whether or not to take the flow information into account when rerouting.
- ❒ Touching [**ALL** (**None**)] selects or deselect all traffic information.

4 Touch [OK].

The selected traffic information icon is added to the screen.

- ❒ The following types of traffic congestion cannot be deselected and are always displayed and taken into consideration: stop and go, stopped traffic, and closed/ blocked roads.

5 Touch [Back].

Using the XM Tuner to View Stock, Sports, and Other Information

When an XM tuner (GEX-P10XMT) is connected, you can receive stock price, sports and other information, and display it onscreen. You may also register favorite information on the navigation system.

Displaying stock prices

Can display the prices of up to 12 stocks.

1 Touch [Information] in the navigation menu, and then touch [Stock Info].



The screen displays a list of stock prices.

- ❒ Although the stock price information displayed onscreen is updated every 30 seconds (approx.), these prices are not real-time values.

Registering stocks to be displayed

1 Touch [Information] in the navigation menu, and then touch [Stock Info].

2 Touch [Add].

3 Input the Ticker text for the stocks you want to display, then touch [OK].



[0-9], [Punc.], [Oper], [Sym.]:

You can switch the upper line to input the number and marks.

- ❒ The method for inputting the text is almost same as for inputting street names.
- ➲ Text input method → Page 27
- ❒ If the input ticker symbol does not match in full the actual ticker symbol for the stock, you may not be able to find it.

Deleting stocks to be displayed onscreen

Can display the prices of up to 12 stocks. If 12 stocks are already registered, delete as many entries as necessary to add new stocks.

1 Touch [Information] in the navigation menu, and then touch [Stock Info].

2 Touch [Delete].

3 Touch the ticker of the stock you want to delete.

A red check appears next to the ticker you touched.

- ❒ To delete all registered stocks, touch [**All**]. Red checks will appear next to all tickers.

4 Touch [Delete].

A message will appear asking you to confirm the deletion.

5 Touch [OK].

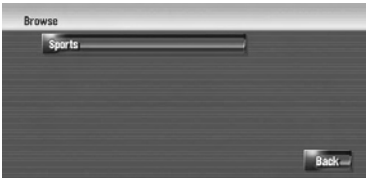
Displaying browsable information

❒ The displayed items depend on the information which is sent from each station.

1 Touch [Information] in the navigation menu, then touch [Browse].

The screen will display a list of categories. The information appearing onscreen is automatically updated at regular intervals.

2 Touch a category you want to browse from the list.



3 Touch the topic you wish to view.



4 Touch an item (a topic) to display the contents.



Submenu :

Displays the submenu. If there is no submenu for the contents, the [**Submenu**] will be invisible.

Store :

Registers the current item (topic) about which information is displayed as a favorite.

➲ Confirming your favorite information → Page 74

Displaying favorite browsable Information

XM special contents can be assigned as a shortcut or [**My Favorites**] so that it can be accessed without searching every time an update is needed. The following are the instructions on how to do it:

1 Store the desired item (topic).

➲ Displaying browsable information → Page 74

2 Touch [Information] in the navigation menu, and then touch [My Favorites].

A list of registered items (topics) appears on the screen. Touch the item to display information about this item.



Deleting favorite browsable information

1 Touch [Information] in the navigation menu, and then touch [My Favorites].

2 Touch [Delete].

3 Touch the name of the items you want to delete.



A red check appears next to the items you touched.

❒ To delete all favorite contents, touch [**All**]. Red checks will appear next to all items.

4 Touch [Delete].

5 A message will appear asking you to confirm the deletion. Touch [OK].

Checking the Reception Status of the XM Tuner

The current XM tuner's (GEX-P10XMT) reception status and signal strength appear on screen. (The information that is transmitted via XM DATA cable is displayed in this screen.)

1 Touch [Information] in the navigation menu, and then touch [XM Status].



(1) Status
Depending on the XM tuner's (GEX-P10XMT) reception status, any one of the following may appear.

OK
No problem.

Updating
Updating encryption code.

Check antenna
Improper antenna connection.

Not Connected

(2) Signal Strength
Depending on the signal strength, any one of the following may appear.

Very Strong
Strong
Marginal
Weak
No signal

(3) Radio ID
The radio ID appears.

❒ If you have subscribed to either XM audio only or XM NavTraffic stand alone, you will see [**Updating**] in the [**Status**]. This is because the GEX-P10XMT is constantly checking to see if you have decided to add the other service while your navigation system is turned on. If you subscribe to both services, appropriate status will be shown in the [**Status**].

Emergency Info

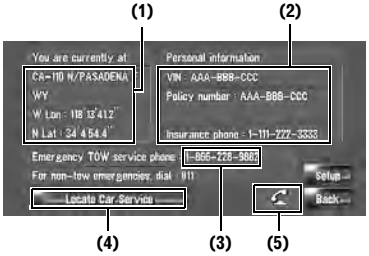
The Emergency Info screen provides important emergency information pertaining to your vehicle, insurance, and current location. Such emergency information could be useful in the event of an accident or vehicle breakdown. The accuracy of the personal information is dependent on the accuracy of the information entered into the navigation system by the user.

⚠ WARNING

- **The Emergency Info screen is only intended to provide information to a driver that may be useful during an emergency situation, and does not replace the need to call for emergency assistance, when necessary.**

Checking the information registered as Emergency Info

1 Touch [Information] in the navigation menu, and then touch [Emergency Info].



The information registered as **Emergency Info** appears on the screen.

(1) You are currently at :
Your current position is indicated by the street name, latitude, and longitude.

(2) Personal Information :
Your VIN number, insurance policy number, and the telephone number of your insurance company can be displayed once entered by the user.

(3) Emergency TOW service phone :
The phone number of the subscribing Emergency TOW service can be displayed once entered by the user. The default or factory setting is the phone number of the Emergency Roadside Assis-

tance service provided by Signature's Nationwide Auto Club, Inc.

1 year of free Emergency Roadside Assistance service

1 year of free Emergency Roadside Assistance service is available to all registered owners and provided by Signature's Nationwide Auto Club, Inc. The first year of Emergency Roadside Assistance service is paid for by Pioneer only if your navigation system is registered with Pioneer and you sign up on-line with Signature's Nationwide Auto Club, Inc. at the time you register your navigation system with Pioneer. If you have not signed up for this service with Signature's Nationwide Auto Club, Inc., or if your free one-year period has expired, you are subject to charges by Signature's Nationwide Auto Club, Inc. You are also subject to be changed by Signature's Nationwide Auto Club, Inc. for roadside services not included in the Emergency Roadside Assistance service. The terms and conditions regarding the Emergency Roadside Assistance service provided by Signature's Nationwide Auto Club, Inc. are determined solely and exclusively by Signature's Nationwide Auto Club, Inc. Please contact Signature's Nationwide Auto Club, Inc. for more information. The telephone number that appears here by default is the toll free number for this service. For additional details on registering for this service, please check your product registration card included with this product. If you are not interested in the free Roadside Assistance service, this number can be edited and replaced by your own roadside assistance telephone number.

❒ The police number is shown as 911 and cannot be changed.

(4) Locate Car Service

➲ "Searching for car service in an emergency" ➞ Page 77

(5) Dial each number

➲ "Dialing the correspond number in emergency" ➞ Page 76

Dialing the correspond number in emergency

⚠ CAUTION

This function can be valid only when all following conditions are satisfied:

- **The Bluetooth unit (sold separately) is connected with navigation system.**
- **The communication for Hands-free phoning is activate between the cellular phone featuring Bluetooth technology and the navigation system.**

1 Touch [Information] in the navigation menu, then touch [Emergency Info].

2 Touch .

A list of telephone numbers appears onscreen.



3 Touch the phone number you want to dial.

The signal is transmitted to the selected phone number.



Touching terminates the call.

❒ Touch [**Back**] to return to the previous screen.

Searching for car service in an emergency

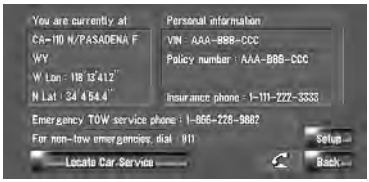
In an emergency, you can search the Emergency Info for Auto Services in the vicinity of your current position and set the current route.

⚠ WARNING

- **The Emergency Info screen is only intended to provide information to a driver that may be useful during an emergency situation and if they are in a safe location. If not, or in all major accidents, call 911 directly.**

1 Touch [Information] in the navigation menu, then touch [Emergency Info].

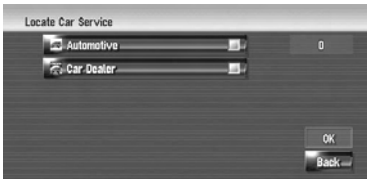
2 Touch [Locate Car Service].



A list of auto services appears onscreen.

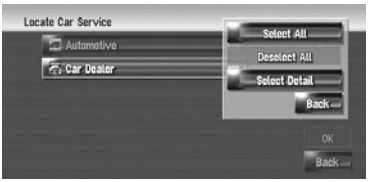
3 Touch the Category of the auto service you want to use.

A red check appears next to the selected category.



❒ The Auto Service categories that can be selected in the Emergency Info are: [**Automotive**] and [**Car Dealer**].

4 Touch the selection method.



Select All

Selects all detailed categories included in that category.

Deselect All

Cancels the selected detailed categories.

Select Detail

Selects a detailed category from the list.

❒ If you want to search with more detailed categories, touch [**Select Detail**]. When the subcategory list appears, touch the item and touch [**Back**]. When only a few types of the detailed categories are selected, blue check marks will appear.

5 Repeat Step 3 and 4, select a category, and touch [OK].

The POI in the selected category or detailed category is searched.

6 Touch the name of the facility to set the route you want.



Displays the route to the selected facility.

Registering user information

Prepare the vehicle inspection certificate or insurance certificate, and input the information written on it.

1 Touch [Information] in the navigation menu, and then touch [Emergency Info].

2 Touch [Setup].

3 Touch the desired item to register your information.



❒ If information is already registered, that information will appear.

4 Input the number you wish to register, then touch [OK].

Completes the registration.



Edit VIN

Register your Vehicle's Identification Number. (You can enter between 1 and 17 digits.)

Edit Policy Number

Register your insurance policy number.



Edit Insurance Phone

Register your insurance company's phone number.

Edit TOW Service Phone

Register a towing company's phone number.

❒ If touch [**Default**], and then TOW service phone number restore default number.

Setting the Vehicle Dynamics Display

You can change the content of meter on the left and right of the Vehicle Dynamics Display. Until the sensor's initial learning is complete, only the voltage and clock are available.

❒ The speed displayed is a guideline and may not correspond to the actual speed.

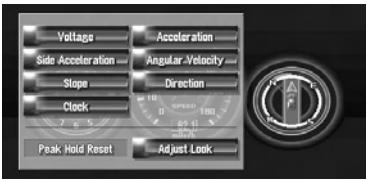
1 Switch to the Vehicle Dynamics Display.

➲ Changing the map display mode ➞ Page 37

2 Touch the left or right meter.

Touch keys are displayed.

3 Touch the items you want to display.



You can select the following items.

Voltage :

Displays the power supply and voltage supplied from the battery to this system.

Acceleration :

Acceleration in a forward direction is displayed. The + sign indicates acceleration while the – sign indicates deceleration.

Side Acceleration :

Acceleration in a side direction such as when turning, is displayed. The + sign indicates a right turn, while the – sign indicates a left turn.

Angular Velocity :

Displays the vehicle's turning angle over one second (how far it has turned in a second).

Slope :

Displays the vehicle's vertical movement. The + side represents the rising angle, and the – side the falling angle.

Direction :
The direction your vehicle is traveling in is displayed.
Clock :
Current time is displayed.
Adjust Look :
Touch [**Adjust Look**] to display a screen for selecting the panel pattern. Touch one of the patterns from among those displayed onscreen to change the panel to the selected pattern.

- ❒ If you touch [**Peak Hold Reset**], the maximum and minimum (green line) values indicated in [**Acceleration**] and [**Side Acceleration**] are reset.
- ❒ You cannot change the speedometer at the center.
- ❒ Selecting **Demo Mode** in the Settings menu enables you to perform a demonstration with random values.

Using Hands-free Phoning

Hands-free Phoning Overview

⚠ CAUTION

- **For your safety, avoid talking on the phone as much as possible while driving.**

If your cellular phone featuring Bluetooth technology, this navigation system can be connected to your cellular phone wirelessly. Using this hands-free function, you can operate the navigation system to make or receive phone calls. You can also transfer the phone book data stored in your cellular phone to the navigation system.
This section describes how to set up a Bluetooth connection, and how to operate a cellular phone featuring Bluetooth technology on the navigation system.
The following description assumes that the device name of the cellular phone to be connected using Bluetooth wireless technology is set to [**My Mobile Phone**].

Preparing communication devices

To use the cellular phone featuring Bluetooth wireless technology on the navigation system, the Bluetooth adapter (ND-BT1) (sold separately) is required.

Precautions on using a cellular phone featuring Bluetooth technology

By connecting the Bluetooth unit (sold separately), you can use the functions described in this manual, including hands-free phoning or address book transfer. To use these functions, the cellular phone featuring Bluetooth wireless technology that you want to connect must have a supported profile that is the same as the profile for the Bluetooth unit. For the supported profile, refer to the owner's manual of the Bluetooth unit.

❒ Please read "Notes for hands-free phoning" for your reference.

➲ "Notes for hands-free phoning" → Page 89

❒ When the power of the navigation system turns off, Bluetooth is also disconnected. When the system restarts, the system automatically attempts to reconnect the cellular phone previously connected. Even when the connection is cut for some reason, the system automatically reconnects the specified cellular phone (except for the case where the connection is cut by the cellular phone operation).

You can open [**Phone Menu**] directly to press and hold the **MENU** button.



❒ You can check the signal strength for connection between your cellular phone and Bluetooth unit with [**Connection Status**] in [Hardware] Menu.

➲ [**Connection Status**] → Page 93

❒ You can set the voice volume and ring volume with [**Volume**] in Settings Menu.

➲ [**Volume**] → Page 91

❒ You can set to mute peripheral sounds during hands-free phoning.

➲ [**Mute Set**] → Page 155

While your mobile phone featuring Bluetooth wireless technology is connected, is displayed on the map.

Setting up for hands-free phoning

Before you can use the hands-free phoning function, you will need to set up the navigation system for using that function. This entails registering your cellular phone with the navigation system and establishing a Bluetooth wireless connection between the navigation system and your cellular phone.

Registering your cellular phone

You need to register your cellular phone featuring Bluetooth wireless technology when you connect it for the first time. A total of five phones can be registered. Two registration methods are available:

- Registration from the navigation system
- Registration from the cellular phone

❒ Once you registered that phone, you can select that cellular phone from the list to connect it without registration.

➲ "Connecting a registered cellular phone" → Page 83

❒ The default device name displayed on the cellular phone is [**PIONEER NAVI**]. The default password is [**1111**].

Operating from the navigation system

1 Activate the Bluetooth wireless technorogy on your mobile phone.

For some mobile phone no specific action is necessary in activation for Bluetooth wireless technorogy. For details, refer to the instruction manual of your mobile phone.

2 Touch [Information] in the navigation menu, and then touch [Phone Menu].

3 Touch [Phone Settings].

The phone settings screen appears.

4 Touch [Registration].



5 Touch [Navi].

The system searches the cellular phones Bluetooth technology that are waiting for the connection and displays them in the list.

6 Wait until your mobile phone appears in the list.

❒ If you cannot find the cellular phone you want to connect, check that the cellular phone is waiting for the Bluetooth wireless technology connection.

7 Select the cellular phone you want to register from the list.

8 Enter the password of the navigation system to register it using your cellular phone.

After the registration is completed, the following screen appears.



❒ If registration fails, repeat the procedure from the beginning. If a connection still cannot be established, try connecting using your cellular phone.

Operating from your cellular phone

9 Activate the Bluetooth wireless technorogy on your mobile phone.

For some mobile phone no specific action is necessary in activation for Bluetooth wireless technorogy. For details, refer to the instruction manual of your mobile phone.

10 Touch [Information] in the navigation menu, and then touch [Phone Menu].

11 Touch [Phone Settings].

The phone settings screen appears.

12 Touch [Registration].



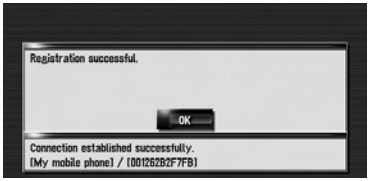
13 Touch [Mobile].

The navigation system waits for a Bluetooth wireless technology connection.

14 Operate your cellular phone to register the navigation system.

If your cellular phone asks you to enter a password, enter the password of the navigation system.

After the registration is completed, the following screen appears.



❒ If registration fails repeat the procedure from the beginning.

Connecting a registered cellular phone

The navigation system automatically connects the cellular phone selected as a target of connection. However, connect the cellular phone manually in the following cases:

- Two or more cellular phones are registered, and you want to manually select the cellular phone to be used.
- You want to reconnect a disconnected cellular phone.
- Connection cannot be established automatically for some reason.

❒ Unregistered cellular phones cannot be connected.

1 Activate the Bluetooth wireless technorogy on your mobile phone.

For some mobile phone no specific action is necessary in activation for Bluetooth wireless technorogy. For details, refer to the instruction manual of your mobile phone.

2 Touch [Information] in the navigation menu, and then touch [Phone Menu].

3 Touch [Phone Settings].

The phone settings screen appears.

Phone name currently connected or selected as a target of connection



4 Touch [Connection].

5 Touch a cellular phone name you want to connect.

When a connection is successfully established, a connection complete message appears, and the system returns to the phone menu screen.

❒ To cancel the connection to your cellular phone, touch [**Cancel**].

❒ If connection fails, check whether your cellular phone is waiting for a connection, and then repeat the procedure from step 4.

Editing the device name

You can change the device name to be displayed on your cellular phone. (Default is [**PIONEER NAVI**].)

6 Touch [Information] in the navigation menu, and then touch [Phone Menu].

7 Touch [Phone Settings].

The phone settings screen appears.

8 Touch [Device Name].

9 Touch any key to enter the name you want to set and then touch [OK].

➲ About Keypad operation ➞ Page 27

❒ Up to 20 characters can be entered for a device name.

Editing the password

You can change the password to be used for authentication on your cellular phone. (Default is [**1111**].)

10 Touch [Information] in the navigation menu, and then touch [Phone Menu].

11 Touch [Phone Settings].
The phone settings screen appears.

12 Touch [Password].

13 Touch any key to enter the password you want to set and then touch [OK].
➲ About Keypad operation → Page 27
❒ Four to eight characters can be entered for a password.

Receiving a phone call

You can use the navigation system to receive a call hands-free.
The map screen shows the icon while your cellular phone featuring Bluetooth wireless technology is connected. You can recieve a hands-free call only when the mobile phone is connected.

Connecting icon



Answering an incoming call

The system informs you that it is receiving a call by displaying a message and producing a ring sound once.

1 When there is an incoming call, touch .



When there is an incoming call, you can reject the call by touching .
❒ During a call, the is displayed at the right-hand side of the screen.

2 To end the call, touch at the top right of the screen.
The call ends.

❒ If the received voice is too quiet to hear, you can adjust the volume of the received voice.
➲ **Incoming Voice** → Page 91
❒ Depending on the subscription status of the caller ID service, the phone number of the received call may not be displayed, and [**Unknown**] appears instead.
❒ You may hear a noise when you hang up the phone.

Making a phone call

You can make a phone call in many different ways.

Direct dialing

1 Touch [Information] in the navigation menu, and then touch [Phone Menu].

2 Touch [Dial].
The phone settings screen appears.

3 Input the phone number, and then touch to make a call.



To cancel the call after the system starts dialing, touch .

4 To end the call, touch at the top right of the screen.

Dialing from the dialed number history or the received call history

1 Touch [Information] in the Navigation menu, and then touch [Phone Menu].

2 Touch [Dialled Numbers] or [Received Calls].
The list of either one appears.

3 Touch a name or telephone number from the list to make a call.

Date and time of the call dialed or received



4 Touch to make a call.
To cancel the call, touch .



❒ When you make a call to the phone number in [**Received Calls**] without "**+**", you can add "**+**" in front of that number by touching [**+**]. To delete "+", touch [**+**] again in that time.

5 To end the call, touch at the top right of the screen.

❒ Up to 30 entries for each of the dialed number and received call histories are recorded automatically. When the number of entries exceeds 30, the entries will be deleted from the oldest one.

❒ You can clear the dialed number or received call history.

➲ Clearing the dialed number or received call history → Page 89

Calling a number in the Phone Book

After finding the list in the Phone Book you want to call, you can select the number and make the call.

❒ Before using this function, you need to transfer the phone book stored in your cellular phone to the navigation system.

➲ "Transferring the phone book" → Page 87

1 Touch [Information] in the Navigation menu, and then touch [Phone Menu].

2 Touch [Phone Book].
The phone book screen appears.

3 Touch a name from the list to make a call.
If you touch an alphabet tab, you can jump to the first page of the contacts whose names start with that letter.



Touch the entry in the list to make a call.

❒ To cancel the call, touch .

4 To end the call, touch at the top right of the screen.

Calling a number in the Dial Favorites

After finding the list in the Dial Favorite you want to call, you can select the number and make the call.

❒ Before using this function, you need to set the phone number from the phone book to Dial Favorite.

➲ Registering the phone number to Dial Favorite → Page 87

1 Touch [Information] in the Navigation menu, and then touch [Phone Menu].

2 Touch [Dial Favorite].
The Dial Favorite screen appears.

3 Touch one of [Favorite 1] to [Favorite 5] to make a call.
Touch the entry to make a call.
To cancel the call after the system starts dialing, touch .

4 To end the call, touch at the top right of the screen.

Dialing the entry in the Address Book

You can make a call to the entry registered in the address book.

❒ You cannot make a call to locations if phone number is not registered.

1 Display the Address Book.
➲ Operation of the Address Book → Page 61

2 Touch of the entry you want to call.
The detail screen appears.

3 Touch to make a call.



To cancel the call after the system starts dialing, touch .

4 To end the call, touch at the top right of the screen.

Dialing a facility's phone number

You can make a call to facilities with phone number data.

1 Perform [POI Search] or [Vicinity Search] and display the detail information.
➲ Operation of [**POI Search**] → Page 51
➲ Operation of [**Vicinity Search**] → Page 53

2 Touch of the entry you want to call.
The detail screen appears.

3 Touch to make a call.



To cancel the call after the system starts dialing, touch .

4 To end the call, touch at the top right of the screen.

Dialing from the map

You can make a call by selecting an icon of a registered location or a POI icon from the map screen.

❒ You cannot make a call to locations or POIs that have no phone number data.

1 Scroll the map, and point the cursor on an icon on the map.

2 Touch .



The detail screen appears.

3 Touch to make a call.
To cancel the call after the system starts dialing, touch .

4 To end the call, touch at the top right of the screen.

Transferring the phone book

You can transfer the data from the phone book* stored in your cellular phone to the phone book stored in the navigation system.
By transferring the phone book to the navigation system, you can browse the data in the transferred phone book on the screen of the navigation system. You can also select the entries in the phone book to make a call from the navigation system or edit the data on the navigation system.

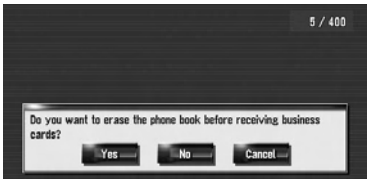
- ❒ Depending on the cellular phone, "Phone Book" may be called by "Contacts", "Business card".
- ❒ The Phone Book can hold a total of 400 entries.
- ❒ The Hands-free phoning connection is disconnected to establish the connection for phone book transfer. When the phone book is transferred, hands-free phoning is reconnected automatically.
- ❒ The phone book of this navigation system cannot assign the multiple telephone numbers for one person's name.

1 Connect your cellular phone featuring Bluetooth wireless technology.

➲ "Registering your cellular phone" ➞ Page 82

2 Touch [Information] in the Navigation menu, and then touch [Phone Menu].

3 Touch [Read Bus. Card].
If there is a phone book already transferred, the following screen appears.



[Yes]:
Deletes all phone numbers stored in the phone book, and then transfers the data.

[No]:
Stay the current entries and then adds new data to the phone book. (Duplicate data cannot be consolidated.)

- ❒ If you want to keep the existing phone book, select [**No**].

4 Check that the following screen is displayed, and operate your cellular phone to transfer the phone book entries.
The phone book entries in your cellular phone are transferred to the navigation system. To cancel the transfer, touch [**Cancel**].

- ❒ Only the names and telephone numbers can be transferred.
- ❒ The transferred data can be edited on the navigation system.

➲ Editing a phone book data ➞ Page 88

Registering a phone number in Dial Favorite

You can register up to five entries in the phone book. Registering the phone numbers that you frequently use in Dial Favorite will ease the dialing operation. The names registered in Dial Favorite can be operated from the shortcut menu. You can also use Voice Recognition to make a call by saying the phone number.

1 Touch [Information] in the Navigation menu, and then touch [Phone Menu].

2 Touch [Dial Favorite].

3 Touch [Set].
The Phone book screen appears.

4 Touch the entry you want to register in Favorite.
The Phone book Record screen appears.

5 Touch [OK].
The selected entry is registered in the corresponding Dial Favorite.

Editing the Phone Book data

You can edit the imported phone book data or add new data. You can edit [**Name**], [**Phone number**], or [**Picture**]. You can also delete unnecessary data.

❒ The data cannot be transferred back to the cellular phone.

Adding new data

1 Touch [Information] in the Navigation menu, and then touch [Phone Menu].

2 Touch [Phone Book].

3 Touch or [Add].
The edit screen appears.

❒ To add data by entering it as desired, touch [**Add**].

4 Select the entry you want to edit.



[Name] or [Phone #]:
Enter the name and the phone number to be displayed in the phone book. Touch [**OK**] to complete the input and return to the previous screen.

➲ About Keypad Operation ➞ Page 27

❒ The name can be input 40 characters long and phone number can be input 32 characters long.

❒ The edited names and phone numbers are reflected to the dialed number history and the received call history. However, they are not reflected to the data registered in [**Dial Favorite**].

[Picture]:
Sets the image to be displayed when a call is received.

➲ Customizing a picture for phone book record ➞ Page 88

5 Touch [OK].
The selected data is added to the phone book.

Customizing a picture for phone book record

Be sure to read “Limitations for import the picture” before creating the CD-R (-RW).

➲“Limitations for import the picture” ➞ Page 97

You can customize a picture for the phone book record. Some pictures are already stored in the hard disk drive, and you can also import JPEG format pictures, such as a picture on your digital camera by using CD-R(-RW). If you burn the pictures into a CD-R (-RW) by your PC and insert that to the navigation system, you can use them. Here, a method for changing the picture is described with an example of loading a picture stored on a CD-R (-RW) onto the navigation system.

1 Check that no disc is inserted, and insert your CD-R (-RW) to the disc loading slot.

2 Touch [Picture], and then touch [Import from Disc].
The list of the pictures stored in a CD-R (-RW) is displayed.
On this screen, you can select the following item:
Back to Original:
The picture originally used when the system was purchased is selected.

❒ Touching other than [Import from Disc] allows you to select a background image stored on the hard disk drive.

3 Touch a picture you want to set.

4 Touch [Yes].
On this screen, you can select the following items:
No:
This is selected when you want to change to another picture. Return to Step 3.

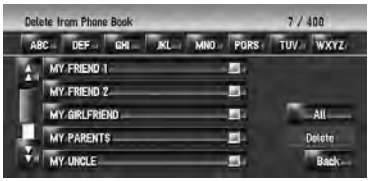
Deleting data

1 Touch [Information] in the Navigation menu, and then touch [Phone Menu].

2 Touch [Phone Book].

3 Touch [Delete].
The Phone Book Delete screen appears.

4 Touch the entry you want to delete.
A red check mark appears next to the selected entry. To cancel the selection, touch the entry again.



5 Touch [Delete].

6 Touch [Yes].
The data is deleted, and the current location screen appears.
❒ To cancel the deletion, touch [**No**].

Editing the received call or dialed number history

You can edit the data in the dialed number history or the received call history. You can edit [**Name**], [**Phone number**], or [**Picture**]. The edited entries are registered in the phone book. You can also delete the history data.

Editing data

1 Touch [Information] in the Navigation menu, and then touch [Phone Menu].

2 Touch [Dialled Numbers] or [Received Calls].

3 Touch .
The edit screen appears. Steps after this are the same as for editing the phone book.
➲ Editing the Phone Book data → Page 88
❒ The phone number cannot be edited if it is already registered in the phone book.

Deleting data

1 Touch [Information] in the Navigation menu, and then touch [Phone Menu].

2 Touch [Dialled Numbers] or [Received Calls].

3 Touch [Delete].

4 Touch [Yes].
All history data is deleted, and the current location screen appears.
❒ To cancel the deletion, touch [**No**].

Notes for hands-free phoning

General notes

- Connection to all cellular phones featuring Bluetooth wireless technology is not guaranteed.
- The line-of-sight distance between this navigation system and your cellular phone must be 10 meters or less when sending and receiving voice and data via Bluetooth technology. However, the transmission distance may become shorter than the estimated distance, depending on the environment in use.
- You cannot delete the registered cellular phone. If you need to delete it, refer to “Returning the Navigation System to the Default or Factory Settings”, and delete it together with other functions.
- With some mobile phones, the speakers of the system may not produce a ring sound.
- If the private mode is selected on the cellular phone, hands-free phoning may not be performed.

About registration and connection

- Operation of cellular phone varies depending on the type of your cellular phone. Refer to the instruction manual that came with your cellular phone for detailed instructions.

About making and receiving calls

- You may hear a noise in the following situations:
  — When you answer the phone by using the button on the phone.
  — When the person on the other end of line hangs up the phone.

- With some cellular phones, even if you press accept button on the cellular phone when a call arrives, hands-free phoning may not be performed.
- The registered name appears if the phone number of the received call is already registered in the phone book. When one phone number is registered under different names, the name that starts with the alphabet that precedes that of the other is displayed.
- If the phone number of the received call is not registered in the phone book, the phone number of the received call appears.

About received call history and dialed number history

- Calls made or editing performed only on your cellular phone will not be reflected to the dialed number history, or phone book in the navigation system.
- You cannot make a call to the entry of an unknown user (no phone number) in the received call history.
- If calls are made by operating your cellular phone, no history data will be recorded in the navigation system.

About phone book transfer

- With some cellular phones, it may not be possible to transfer all items in the phone book at one time. In this case, transfer item one by one from your cellular phone.
- Depending on the cellular phone that is connected to this navigation system via Bluetooth technology, this navigation system cannot display the phone book correctly. (Some characters may be garbled or first name and last name is put in reverse order.)
- If the phone book in the cellular phone contains image data, phone book may not be correctly transferred. (Image data cannot be transferred from the cellular phone.)

❒ Depending on the cellular phone, phone book transfer cannot be available.

Modifying the General Settings for Navigation Functions

⚠ CAUTION

- **For safety reasons, these functions are not available while your vehicle is in motion. To enable these functions, you must stop in a safe place and put on the parking brake before setting your route (see page 18 Interlock for details).**

Entering the Settings Menu

1 Press the MENU button to display the navigation menu.

2 Touch [Settings] to display the Settings menu.

3 Change the setting.

Adjusting each item → Page 91 to 98

❒ This section describes the details of the setting for each item. Settings marked with an asterisk (*) show that they are default or factory settings.

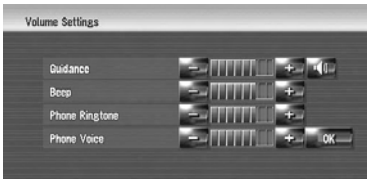
Setting the Volume Related to the Guidance and Phone

The sound volume for the navigation can be set. You can separately set the volume of the route guidance and the beep sound.

1 Touch [Settings] in the navigation menu, then touch [Volume].

2 Touch [+] or [–] to set their volume.

On this screen, you can operate the following items.



Guidance

This setting controls the guidance volume of navigation.

When you set this to , a guidance is output. When you set this to , no guidance is output.

Beep

This setting controls the beep tone volume of navigation.

Phone Ringtone

This setting controls the incoming ring tone volume.

Phone Voice

This setting controls the incoming voice volume.

❒ The **Phone Ringtone** and **Phone Voice** adjustments are related to the cellular phone featuring BT technology. No adjustment is needed when the cellular phone featuring BT technology is not connected.

❒ Volume of the audio source is adjusted by the **VOL (▲/▼)** button of the navigation system.

3 To finish the setting, touch [OK].

Customizing the Regional Settings

Changing the language for navigation guidance and menu

You can select the language to be used for the navigation function. (Once you change the language, the program restarts.)

⚠ CAUTION

- **Once the installation of the program starts, do not stop the engine of your vehicle and do not switch off the navigation system until the installation is completed and the map of your surroundings appears.**

1 Touch [Settings] in the navigation menu, then touch [Regional Settings].

2 Touch [Language].

3 Touch the language which you want to use.

Once you change the language, the program restarts.



- Touching [**Back**] returns you to the previous display.
- If you select [**English with TTS**], the name of the next street you will pass is vocally announced. If you select [**English without TTS**], the name of the next street you will pass is not vocally announced.

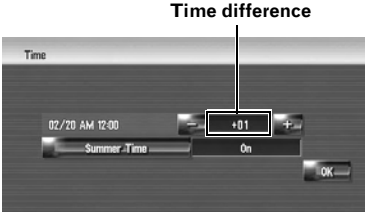
Setting the time difference

Adjusts the systems clock. The time difference (+, –) between the time originally set in your navigation system is set here.
You can also select summer time On/Off.

1 Touch [Settings] in the navigation menu, then touch [Regional Settings].

2 Touch [Time].

3 To set the time difference, touch [+] or [–].

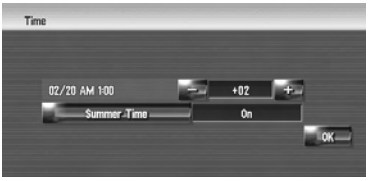


The time difference between the time originally set in the navigation system (Pacific Standard Time) and the current location of your vehicle is shown. If necessary, adjust the time difference. Touching [**+**] or [**–**] changes the time difference display in one-hour increments.

The time difference can be set from +3 to –3 hours.

4 If necessary, set to summer time.

Daylight Saving Time (DST) is off by default. Touch [**Summer Time**] to change the time if you are in the daylight saving period. This turns the display below summer time [**On**].



5 To finish the setting, touch [OK].

Customizing the keyboard layout

You can select the type of keyboard to be used for inputting characters.

1 Touch [Settings] in the navigation menu, then touch [Regional Settings].

2 Touch [Keyboard] to select the layout which you want to use.

Each time you touch the key changes that setting.

QWERTY:



QWERTZ



ABC:



AZERTY:



Changing the measure for display

This setting controls the unit of distance displayed on your navigation system.

1 Touch [Settings] in the navigation menu, then touch [Regional Settings].

2 Touch [km / mile] to change the setting.
Each time you touch the key changes that setting.
mile*:
Show distance in miles.
Mile & Yard:
Show distance in miles and yards.
km:
Show distance in kilometers.

Changing the virtual speed of vehicle

When calculating expected time of arrival and the number of hours to the destination, set the average speed for the freeway or ordinary roads using [+] and [–].

1 Touch [Settings] in the navigation menu, then touch [Regional Settings].

2 Touch [Average Speed].

3 Touch [+] or [–] to set their speed.



❒ The estimated time of arrival is not necessarily estimated based on this speed value.

Checking the Setting Related with Hardware

The hardware status, including the driving status of a vehicle, positioning status by satellite, learning status of the 3D sensor, and cable connection status etc., can be checked.

Checking the connections of leads and installation positions

Check that leads are properly connected between the navigation system and the vehicle. Please also check whether they are connected in the correct positions.

1 Touch [Settings] in the navigation menu, then touch [Hardware].

2 Touch [Connection Status].
The Connection Status screen appears.



(1) Speed Pulse
The Speed Pulse value detected by the navigation system is shown. [0] is shown while the vehicle is stationary.
(2) GPS Antenna
Indicates the connection status of the GPS antenna, the reception sensitivity, and from how many satellites the signal is received. If the signal is received correctly, [**OK**] is displayed. If reception is poor, [**NOK**] appears. In such case, please change the installation position of the GPS antenna.
(3) Phone Connection Status
Indicates the connection status of the Bluetooth unit and the signal strength of cellular phone. If the connection of Bluetooth unit is correctly, [**OK**] is displayed. [**NOK**] appears when the Bluetooth unit is not connected or incorrectly connected.

❒ Signal strength may differ from the actual signal strength on the cellular phone.

❒ Depending on the cellular phones featuring Bluetooth technology, signal strength is not available.

(4) Installation Position

The installation position of the navigation system is shown. That indicates whether the installation position of the navigation system is correct or not. If installed correctly, [**OK**] appears. When the navigation system is installed at an extreme angle exceeding the limitation of the installing angle, [Incorrect angle] will be displayed. When the angle of the navigation system has been changed, [**Excessive vibration**] will be displayed.

(5) Parking Brake

When the parking brake is applied, [**On**] is displayed. When the parking brake is released, [**Off**] is displayed.

(6) Power Voltage

The power voltage (reference value) provided from the vehicle battery to the navigation system is shown. If the voltage goes out of the range from 11 to 15V, check that power cable connection is correct.

(7) Illumination

When the headlights or small lamps of a vehicle are on, [**On**] is displayed. Small lamps of a vehicle are off, [**Off**] is displayed. (If the orange/ white lead is not connected, [Off] appears.)

(8) Back Signal

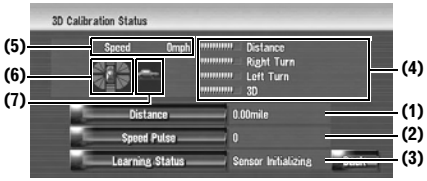
When the gear lever is shifted to [**R**], the signal switches to [**High**] or [**Low**]. (Either of these is displayed depending on the vehicle.)

Checking sensor learning status and driving status

1 Touch [Settings] in the navigation menu, then touch [Hardware].

2 Touch [3D Calibration Status].

The 3D Calibration Status screen appears.



(1) Distance

Driving distance is indicated.

(2) Speed Pulse

Total number of speed pulses is indicated.

(3) Learning Status

Current driving mode is indicated.

(4) Degree of learning

Sensor learning situations of distance (**Distance**), right turn (**Right Turn**), left turn (**Left Turn**), and 3D detection (**3D**) are indicated by the length of bars.

❒ When tires have been changed or chains fitted, turning on the Speed Pulse allows the system detects the fact that the tire diameter has changed, and automatically replaces the value for calculating distance.

❒ If the ND-PG1 is connected, the distance calculation value cannot be replaced automatically.

(5) Speed

Speed detected by the navigation system is indicated. (This indication may be different from the actual speed of your vehicle, so please do not use this instead of the speedometer of your vehicle.)

(6) Acceleration or deceleration/Rotational speed

Acceleration or deceleration velocity of your vehicle is indicated. Also, rotational speed when your vehicle turns to left or right is shown.

(7) Inclination

Degree of slope of the street is indicated.

To clear values...

If you want to delete the learned results stored in [**Distance**], [**Speed Pulse**] or [**Learning Status**], touch the relevant result, then touch [**Yes**].

❒ If you select [**Learning Status**], you can select [**Reset All**] or [**Reset Distance Study**]. To clear all learning statuses, touch [**Reset All**]. To clear only the Distance study, touch [**Reset Distance Study**].

❒ Touch [**Reset All**] for the following cases:

- When you changed the installation position of the navigation system
- When you changed the installation angle of the navigation system
- When you moved the navigation system to another vehicle

❒ When the distance accuracy is low, touch [**Reset Distance Study**].

❒ Touching [**Reset All**] returns the installation angle setting also to the default or factory setting. Reconfigure the setting.

➲ Correcting the installation angle → Page 95

❒ The navigation system can automatically use its sensor memory based on the outer dimensions of the tires.

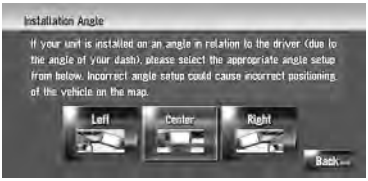
Correcting the installation angle

You can correct the installation angle of the navigation system. Correcting the installation angle improves the accuracy of sensor learning, even if the unit is not facing center. Select the orientation of the LCD panel from the left, center, and right.

1 Touch [Settings] in the navigation menu, then touch [Hardware].

2 Touch [Installation Angle Setup].

3 Check the direction the LCD panel faces, and touch the corresponding item.



Left:
Select this when the angle is 5° or more to the left from the center.
Center:
Select this when the angle is less than 5° to the left, and less than 5° to the right from the center.
Right:
Select this when the angle is 5° or more to the right from the center.

❒ If the [**Learning Status**] in the [**3D Calibration Status**] is [**Simple hybrid**], the installation angle can be corrected.

Checking the device and version information

1 Touch [Settings] in the navigation menu, then touch [Hardware].

2 Touch [Service Info Screen].

3 Check the device and version information.

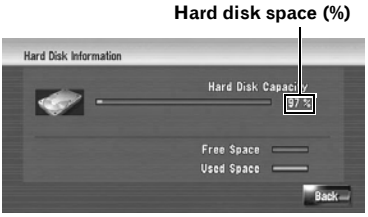
Checking the hard disk information

You can check the volume of the hard disk, current used space and remaining space.

❒ The hard disk space (%) means a free space of the music library. In some cases, even when about 10% of free space is left, no more music track may be recorded due to system restriction.

1 Touch [Settings] in the navigation menu, then touch [Hardware].

2 Touch [Hard Disk Info].



Registering the Home Location and Favorite Location

You can register one home location and one favorite location. You can change the registered information later. You might find it useful to register your workplace or a relative's home as your favorite location.

1 Touch [Settings] in the navigation menu, then touch [Defined Locations].

2 Touch [Go to].
When registering your home location, touch [**Home**].



3 Search for a location to register.
You can select a method of location search.



- ➲ Address Search ➞ Page 26
- ➲ Information on searching locations to register ➞ Page 51 to 56
- ❒ If you select [**Map Search**], move the scroll cursor to the place you want to set and touch [**OK**].

4 Point the scroll cursor to the location you want to register and touch [OK].
The location is registered, and the Edit registered information screen appears.
➲ "Editing a location's information" ➞ Page 61

5 Touch [OK].
Completes the registration.

Changing the Background Picture

Be sure to read "Limitations for import the picture" before creating the CD-R (-RW).

➲"Limitations for import the picture" ➞ Page 97

In the menu operation screen, you can customize a picture for the background. Some pictures are already stored in the hard disk drive, and you can also import JPEG format pictures, such as a picture on your digital camera by using CD-R(-RW). If you burn the pictures into a CD-R (-RW) by your PC and insert that to the navigation system, you can use them as background pictures.
The following two types of background pictures can be changed:

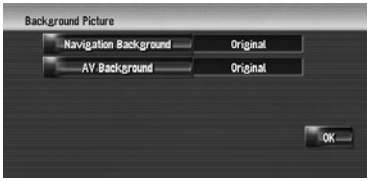
- **Navigation Background**: Background picture of navigation menu screen.
- **AV Background**: Background picture during the operation of audio source screen.

Here, a method for changing the background picture is described with an example of loading a picture stored on a CD-R (-RW) onto the navigation system as the background picture.

1 Check that no disc is inserted, and insert your CD-R (-RW) to the disc loading slot.

2 Touch [Settings] in the navigation menu, then touch [Background Picture Setting].
The picture selected for each screen is indicated on the right side of [**Navigation Background**] and [**AV Background**] items.

3 Touch [Navigation Background] or [AV Background].



4 Touch [Import from Disc].



The list of the pictures stored in the CD-R (-RW) is displayed.
On this screen, you can select the following item:

Back to Original:
The picture originally used when the system was purchased is selected.

- ❒ Touching other than [**Import from Disc**] allows you to select a background image stored on the hard disk drive.

5 Touch a picture you want to set.

6 Touch [OK].



If you touch [**OK**], the background image starts changing. After a short while, the confirmation screen appears.

- ❒ If you want to change to another picture, touch [**Back**] to return to Step 4.
- ❒ When the picture starts to change, do not turn off the vehicle engine until the message appears to indicate that the picture has finished changing.

Limitations for import the picture

When you burn a CD-R (-RW), make sure the total data size of the CD-R (-RW) is greater than 100MB by storing dummy data or the like. If not, the disc may not be recognized with the built-in DVD drive.

- ❒ You cannot use a CD-R (-RW) containing MP3 files or the Audio data part (CD-DA part) for importing pictures.
- ❒ When storing pictures on a CD-R (-RW), create a folder named "**Pictures**" in the CD-R (-RW), and store the picture files in this folder. (Up to 200 picture files can be used in total including pictures are already stored in the hard disk drive and pictures in the CD-R (-RW).)
- ❒ When you burn a CD-R (-RW), limit the number of folder hierarchy levels to eight.
- ❒ You can only use single-session format for importing pictures.
- ❒ Only JPEG format ("**.jpg**" or "**.JPG**") pictures can be used. Progressive format JPEG pictures cannot be used.
- ❒ You can only use standard characters (alphabets of both cases: A-Z, a-z) and numbers (0-9) for the file name (international (accented) characters cannot be used).
- ❒ Pictures up to a maximum of 2 592 x 1 944 pixels can be used. We cannot guarantee proper operation for a picture bigger than this size.

Using the Demonstration Guidance

This is a demonstration function for shops. After a route is set, the simulation of the route guidance to a destination is automatically displayed. Normally, set this to [**Off**].

1 Touch [Settings] in the navigation menu.

2 Touch [Demo Mode] to change the setting.

Each time you touch the key changes that setting.

On:

Repeat demo drive.

Off*:

Demo Mode is set off.

Correcting the Current Location

Touch the screen to adjust the current position and direction of the vehicle displayed on the map.

1 Touch [Settings] in the navigation menu, then touch [Modify Current Location].

2 Scroll the position where you want to set, then touch [OK].

3 Touch the arrow key on the screen to set the direction, then touch [OK].

Restoring the Default Setting

Reset various settings registered to the navigation system and restores to the default or factory settings.

1 Touch [Settings] in the navigation menu, then touch [Restore Factory Settings].

2 Touch [Yes] to clear the current setting.

❒ Touch [**Back**] to cancel clear the current setting.

➲ "Returning the Navigation System to the Default or Factory Settings" → Page 175

Using the AV Source (Built-in DVD Drive and Radio)

You can play or use the following sources with the navigation system.

- DVD-Video
- CD
- MP3 disc
- Radio (FM)
- Radio (AM)
- Music Library

➲ About the music library ➞ Chapter 12

This chapter describes how to use the audio source and the basic operation of the audio source.

Basic Operation

Switching the Audio operation screen

1 Press the AV button to switch Audio operation screen.



(1) Touch panel keys

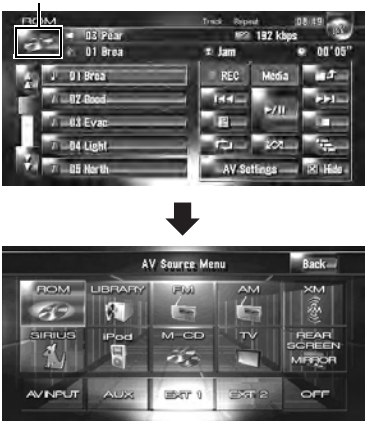
❒ Touch [**Hide**] to hide the touch panel keys. If you touch the screen, the touch panel keys are displayed again.

Selecting a source

1 Press the AV button to switch Audio operation screen.

2 Touch the source icon to select the desired source.

Source icon



❒ You can also press the **AV** button to switch the source.

Press the **AV** button repeatedly to switch between the following sources: [**CD**/**ROM** (MP3)/**DVD**] (built-in DVD drive) — [**LIBRARY**] (Music library) — [**FM**] (FM tuner) — [**AM**] (AM tuner) — [**XM**] (XM tuner) — [**SIRIUS**] (SIRIUS tuner) — [**iPod**] (iPod) — [**M-CD**] (multi-CD) — [**TV**] (television) — [**AV INPUT**] (video input) — [**AUX**] (Auxiliary equipment) — [**EXT 1**] (external unit 1) — [**EXT 2**] (external unit 2)

❒ Touch [**OFF**] to turn the source off.

❒ In the following cases, the sound source cannot to be used:

— When a unit corresponding to each source is not connected to the navigation system.
— When no disc is set in the navigation system.
— When no magazine is set in the multi-CD player.

— When [**AUX Input**] (auxiliary input) is set to [**Off**].
— When [**AV Input**] (video input) is not set to [**Video**].

❒ The term “external unit” refers to future Pioneer devices that are not currently planned for, or although devices are not fully controlled by this navigation system, devices enable control of basic functions. Two external units can be controlled by this navigation system. When two external units are connected, the navigation system allocates them to external unit 1 or external unit 2.

❒ When the [**Auto ANT**] mode is set to [**Radio**], the vehicle’s antenna can be stowed by following the instructions below.

— Change the source from radio (AM or FM) to another source.
— Turn the source off.
— Turn off the ignition switch (ACC OFF).

If the [**Auto ANT**] mode is set to [**Power**], the vehicle’s antenna can be stowed only when the ACC is set to “OFF”.

➲ [**Auto ANT**] → Page 156

About Steering Remote Control

❒ If you operate using the “CD-SR1” Steering Remote Control (sold separately), the following buttons can be used for operation:

PHONE MENU button
Switches to Phone menu when Bluetooth unit (sold separately) is connected.

VR ACTIVATION / OFF HOOK button
Press to accept the call when there is an incoming call.
In other situation, press to start the voice operation.

VR CANCEL / ON HOOK button
Press to reject a call when there is an incoming call.
Press to hang up the phone during talking on the phone.
In voice operation, return to the previous screen.

▲▼ button:
Same function as **P.LIST (▲/▼)** button.

◄► button:
Same function as **TRK (◄/►)** button.

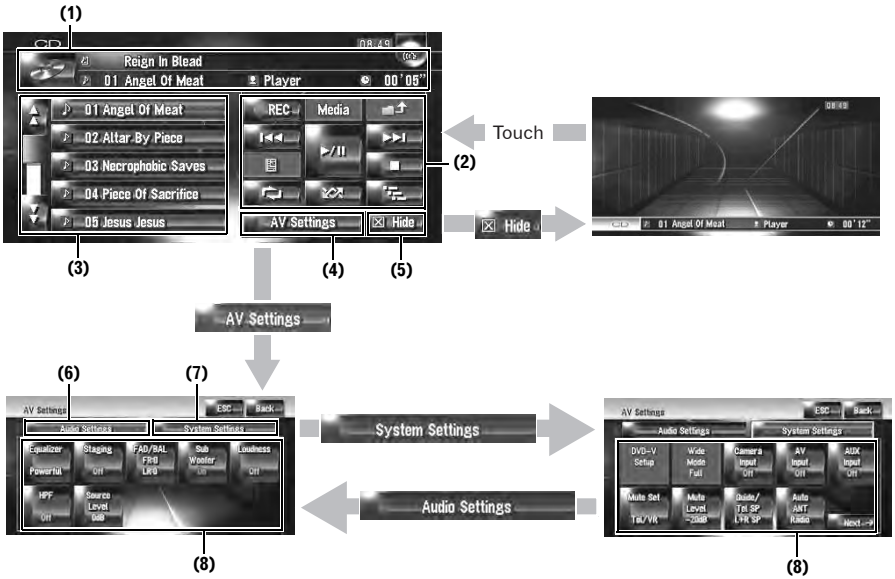
+, - button:
Same function as **VOL (◄/►)** button.

BAND button:
Same function as [**Band**] touch key.

SOURCE button:
Same function as **AV** button.

How to see the audio operation screen and how to display the Audio Settings menu

Normal screen (e.g. CD)



(1) Information plate
Displays the information (e.g. track title, etc.) about the source being played.

(2) Touch panel keys
Touch to operate the source being played.

(3) Detailed information
Displays the detailed information about the source being played.

(4) AV Settings key
Displays the AV Settings menu.

(5) Hide key
Touch [**Hide**] to hide the touch panel keys and detailed information. If you touch the screen, they are displayed again.

(6) Audio Settings tab
Switches the setting items to those for Audio Settings.

(7) System Settings tab
Switches the setting items to those for System Settings.

(8) Setting Items
➲ Customizing the Audio Setting Related with Audio Visual ➞ Chapter 16

Operating the Music CD

You can play a normal music CD using the built-in DVD drive of the navigation unit. This section describes that operations.

Selecting [CD] as the source

1 Press the OPEN button and insert a disc you want to play to disc loading slot.
The source changes and then playback will start.

- ❒ If the disc is already set, touch the source icon and then touch [**CD**].
- ➲ For details, refer to "Selecting a source" → Page 99

❒ When being read in, **Checking disc** is displayed.

About auto hard disk recording

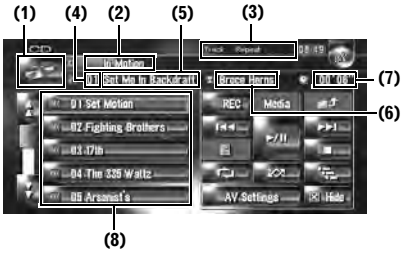
Navigation system can record the tracks of music CD into the hard disk drive.
In default setting, the system starts recording automatically when the unrecorded music CD is inserted.
If you want to cancel the recording, touch [**Stop**].



- ➲ Setting the hard disk recording mode → Page 156
- ➲ "Music Library Recording" → Page 113
- ➲ "Music Library Play" → Page 116

❒ Also see at "Handling and Care of the Disc" in the Hardware Manual for more cautions about handling each media.

Screen configuration



(1) Source icon
Shows which source has been selected.

(2) Disc title indicator
Shows the disc title currently playing. (when available.)

(3) Playback method indicator
Shows which playback method has been selected.

(4) Track indicator
Shows the track number currently playing.

(5) Track title indicator
Shows the track title currently playing. (when available.)

(6) Artist name indicator
Shows the artist name currently playing. (when available.)

(7) Play time indicator
Shows the playback time of the current track.

(8) Track list
Shows tracks of the CD currently playing.

Title display
Music recognition technology and related data are provided by Gracenote®. Gracenote is the industry standard in music recognition technology and related content delivery. For more information visit www.gracenote.com.

❒ A title information will be displayed when the information is found in the Gracenote® Database on the built-in hard disk drive.

❒ When multiple options of title information is find or no title information exists, [–] is displayed. A title may be displayed if you update the title information manually after recording has finished.

➲ "Editing a playlist or tracks" → Page 120

❒ If no title information exists in the Gracenote® Database on the built-in hard disk drive, the date when the track was recorded is entered automatically. If you want to display the title information, enter the title manually after recording has finished.

❒ Changing the title of the playlist or track ➞ Page 122

❒ The title information displayed on the CD playback screen and the recording screen is synchronized with the one edited in the music library. If you edit the title information in the music library, the title displayed on each screen will change accordingly.

❒ When playing a CD TEXT disc, the list lets you see the track titles encoded in CD TEXT disc.

— Some discs have text information encoded on the disc during manufacture. These discs may contain such information as the CD title, track title, artist's name and are called CD TEXT discs.

❒ The maximum umber of characters are 32 characters. But the navigation system incorporates the proportional font. Therefore, the number of the characters which you can display varies according to which of each character.

❒ If the built-in DVD drive does not operate properly, an error message may be displayed.

➲ Error messages ➞ Page 188

Touch key operation

Touch keys



(1) Selecting a desired track from the list
Touch a desired track to play.

(2) Playback and Pause
Touching ►/❚❚ switches between [playback] and [pause].

(3) Touch: Skip the track forward or backward
Touching ►►I skips to the start of the next track. Touching I◄◄ once skips to the start of the current track. Touching again will skip to the previous track.

Touch and hold: Fast rewind or forward
Keep touching I◄◄ or ►►I to perform fast rewind or forward.

❒ You can also perform these operations by using the **TRK (◄/►)** button.

❒ Fast rewind is canceled when it reaches the beginning of the first track on the disc.

(4) Using to stop playback
When you stop playback by touching ■, that track number on the disc is memorized enabling playback from that track when you play the disc again.

❒ To play the disc again, touch ►/❚❚.

(5) Repeat the current track
Each touch of turn the repeat play on or off. [**Track Repeat**] is displayed on the playback method indicator during the track repeat.

❒ If you perform track search or fast forward or rewind, repeat play is automatically canceled.

(6) Playing tracks in a random order
Touching turns the random play on or off.

(7) Scanning tracks of a CD
Touching turns the scan play on or off. Scan play lets you hear the first 10 seconds of each track on the CD. When you find the desired track touch to turn scan play off.

❒ After scanning of a CD is finished, normal playback of the tracks will begin again.

Operating the CD-ROM (MP3 disc)

You can play a MP3 disc using the built-in DVD drive of the navigation unit. This section describes that operations.

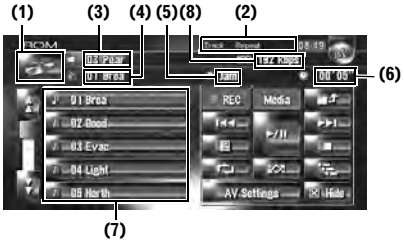
Selecting [ROM] as the source

1 Press the OPEN button and insert a disc you want to play to disc loading slot.
The source changes and then playback will start.

- ❒ If the disc is already set, touch the source icon and then touch [**ROM**].
- ➲ For details, refer to "Selecting a source" → Page 99

- ❒ When being read in, **Checking disc** is displayed.
- ❒ Also see at "Handling and Care of the Disc" in the Hardware Manual for more cautions about handling each media.

Screen configuration



(1) Source icon
Shows which source has been selected.

(2) Playback method indicator
Shows which playback method has been selected.

(3) Folder indicator
Shows the folder number and folder name currently playing.

(4) Track indicator
Shows the track number and track title currently playing.

(5) Artist name indicator
Shows the artist name currently playing.

(6) Play time indicator
Shows the elapsed playing time of the current track.

(7) Folder and track list
Shows contents of the folder currently playing or temporarily displayed.

(8) Bit rate
Shows bit rate of the file currently playing.

Touch key operation

Touch keys



(1) Selecting tracks from the list or viewing contents of the folders
The list lets you see the list of track titles or folder names on a disc. If you touch a folder on the list, you can view its contents. If you touch a track on the list, you can play the selected track.

- ❒ Touching or switches to the next or previous page in the list.
- ❒ If the selected folder does not contain any track which can be played, the track list is not displayed.

(2) Playback and Pause
Touching ►/II switches between [playback] and [pause].

(3) Touch: Skip the track forward or backward
Touching ►►I skips to the start of the next track. Touching I◄◄ once skips to the start of the current track. Touching again will skip to the previous track.

Touch and hold: Fast rewind or forward
Keep touching I◄◄ or ►►I to perform fast rewind or forward.

- ❒ You can also perform these operations by using the **TRK (◄/►)** button.
- ❒ fast rewind is canceled when it reaches the beginning of the first track on the disc.

❒ In the case of MP3, there is no sound on fast rewind or forward.

(4) Using to stop playback
When you stop CD or MP3 disc playback by touching ■, that track number on the disc is memorized enabling playback from that track when you play the disc again.

❒ To play the disc again, touch ►/❚❚.

(5) Selecting upper folder
Touching  to move the upper folder and playback the first track on that folder. If the folder contain no MP3 files, the contents of that folder is shown.

❒ If the current folder is the ROOT folder,  can not be used.

(6) Switching mode between MP3 and music CD (CD-DA) part
When playing discs with MP3 files and audio data (CD-DA) such as CD EXTRA and MIXED-MODE CDs, both types can be played only by switching mode between MP3 and CD-DA. Touching [**Media**] switches between CD-DA part and MP3 part.

(7) Displaying text information on MP3 disc
Text information recorded on a MP3 disc can be displayed.
The next piece of information is displayed.

- **Disc Title** (disc title)*
- **Track Title** (track title)*
- **Folder Title** (folder name)
- **File Name** (file name)
- **Artist Name** (artist name)*
- **Genre** (genre)*
- **Release Year** (release year)*

❒ The information marked with an asterisk (*) only when ID3 tag has been encoded on MP3 files on the disc. If specific information of the ID3 tag has not been encoded on MP3 files on disc, the correspond item may be blank.

(8) Repeating play
Each touch of changes the settings as follows:

- **Track Repeat** — Repeat just the current track
- **Folder Repeat** — Repeat the folder currently playing

❒ If you select another track or perform fast forward/rewind during **Track Repeat**, the repeat play is cancelled.

❒ If you select another folder or perform fast forward/rewind during **Folder Repeat**, the repeat play is cancelled. (You can perform track search within that folder with Folder repeart.)

❒ When **Folder Repeat** is selected, it is not possible to play back a subfolder of that folder.

(9) Playing tracks in random order
Touching  switches between on and off the tracks are randomly played within selected repeat range.

(10) Scanning folders and tracks
Touching  turns the scan play on or off. Scan play will be performed for the selected repeat range.

❒ In default, the beginning of the first track of each folder will be played for about 10 seconds. When [**Folder Repeat**] is selected for repeat play, the beginning of each track in the selected folder will play for about 10 seconds. When you find the desired track, touch  to turn scan play off.

❒ After track or folder scanning is finished, normal playback of the tracks will begin again.

Notes on playing MP3 disc

❒ When playing discs with MP3 files and audio data (CD-DA) such as CDEXTRA and MIXED-MODE CDs, both types can be played only by switching mode between MP3 and CD-DA. When playing back the CD-DA part, the operation is the same as for normal music CDs. Likewise, when playing back the MP3 part, the operation is the same as for MP3. When you operate it, refer to the instruction for each media.

❒ If you have switched between playback of MP3 files and audio data (CDDA), playback starts at the first track on the disc.

❒ Playback is carried out in order of file number. Folders are skipped if they contain no MP3 files. (For example, if folder 001 (ROOT) contains no MP3 files, playback commences with folder 002.)

- ❒ When playing back files recorded as VBR (variable bit rate) files, the play time will not be correctly displayed if fast forward or reverse operations are used.
- ❒ If you are using a folder that does not contain an MP3 file, the folder itself will display but you will not be able to see or play any files in that folder.
- ❒ The maximum umber of characters are 32 characters including extension (.mp3). But the navigation system incorporates the proportional font. Therefore, the number of the characters which you can display varies according to which of each character.
- ❒ If the built-in DVD drive does not operate properly, an error message may be displayed.

➲ Error messages ➞ Page 188

Operating the DVD

⚠ CAUTION

- **For safety reasons, “Video image”s cannot be viewed while your vehicle is in motion. To view “Video image”s, you must stop in a safe place and put on the parking brake before setting your route (see page 18 Interlock for details).**

You can play a DVD-Video using the built-in DVD drive of the navigation system. This section describes operations for DVD-Video.

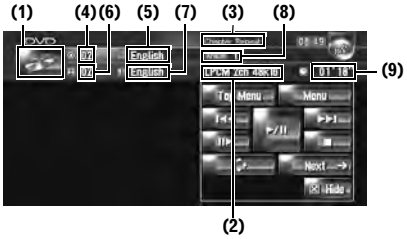
Selecting [DVD] as the source

1 Press the OPEN button and insert a disc you want to play to disc loading slot.
The source changes and then playback will start.

- ❒ If the disc is already set, touch the source icon and then touch [**DVD**].
- ➲ For details, refer to “Selecting a source” ➞ Page 99

❒ Also see at “Handling and Care of the Disc” and “Playable discs” in the Hardware Manual for more cautions about handling DVD-Video.

Screen configuration



(1) Source icon
Shows which source has been selected.

(2) Sound output indicator
Shows which sound output setting has been selected.

(3) Repeat range indicator
Shows which repeat range has been selected.

(4) Title number indicator
Shows the title number currently playing.

(5) Subtitle language indicator
Shows what subtitle language has been selected.

(6) Chapter number indicator
Shows the chapter currently playing.

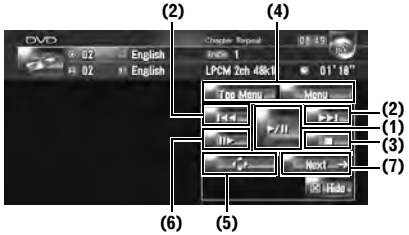
(7) Audio language indicator
Shows what audio language have been selected.

(8) Viewing angle indicator
Shows what viewing angle has been selected.

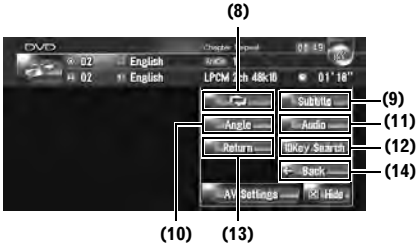
(9) Play time indicator
Shows the elapsed playing time of the current chapter.

Touch key operation

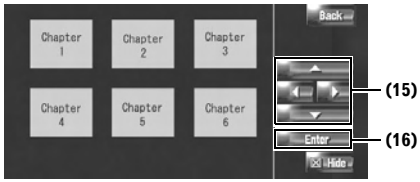
Playback screen (page1)



Playback screen (page2)



Menu screen



❒ With some discs, the icon ⊘ may be displayed, that operation is not valid.

(1) Playback and Pause
Touching ►/II switches between [playback] and [pause].

(2) Touch: Skip the chapter forward or backward
Touching ►►I skips to the start of the next chapter. Touching I◄◄ once skips to the start of the current chapter. Touching again will skip to the previous chapter.

Touch and hold: fast rewind or forward
Keep touching I◄◄ or ►►I to perform fast rewind or forward. If you keep touching I◄◄ or ►►I for five seconds, the icon ◄◄ or ►► changes into ◁◁ or ▷▷. When this happens, fast rewind/ fast forward continues even if you release I◄◄ or ►►I. To resume playback at a desired point, touch ►/II.

❒ You can also perform these operations by using the **TRK (◄/►)** button.

(3) Using to stop playback

(4) Displaying the DVD menu
You can display the menu by touching [**Menu**] or [**Top Menu**] while a disc is playing. Touching either of these keys again lets you start playback from the location selected from the menu. For details, refer to the instructions provided with the disc.

(5) Displaying the DVD menu keypad

(6) Frame-by-frame playback (or slow-motion playback)
Touch and hold to start slow-motion playback. Touching this during playback pauses the image and each touch forwards a frame.
To return to normal playback, touch ►/II.

❒ With some discs, images may be unclear during frame-by-frame playback or slow motion playback.

❒ There is no sound during slow motion playback.

❒ Reverse slow motion playback is not possible.

(7) Switching next page of touch keys

(8) Repeating play
Each touch of the  changes the settings as follows:

- **Chapter Repeat** — Repeat just the current chapter
- **Title Repeat** — Repeat just the current title

❒ If you perform chapter (title) search, fast forward/rewind, or slow motion playback, the repeat play range changes to off.

(9) Changing the subtitle language (Multi-subtitle)
Each time you touch [**Subtitle**] switches between subtitle language.

(10) Changing the viewing angle (Multi-angle)
Each time you touch [**Angle**] switches between viewing angle.

❒ During playback of a scene shot from multiple angles, the angle icon is displayed. Turn angle icon display on or off using "**DVD-V Setup**" menu.

➲ Setting angle icon ➞ Page 152

(11) Changing audio language and audio systems (Multi-audio)
Each time you touch [**Audio**] switches between audio language and audio system.

❒ Only digital output of DTS audio is possible. If navigation system's optical digital outputs are not connected, DTS audio can not be output, so select an audio setting other than DTS.

❒ Display indications such as Dolby D and 5.1ch indicate the audio system recorded on the DVD. Depending on the setting, playback may not be with the same audio system as that indicated.

(12) Specifying the chapter you want to play back or time to start playback by entering a number

➲ "Searching for a desired scene, starting playback from a specified time" ➞ Page 108

(13) The operation (such as resuming) stored in the disc will be performed
When using a DVD that has a point recorded that indicates where to return to, the DVD returns to the specified point and begins play back from that point.

(14) Switching previous page of touch keys

(15) Selecting the DVD menu item

(16) Using to decide the item
When you select a certain video item, playback starts from the selected item. When you select the item with submenu, next menu screen will appear.

❒ The way to display the menu differs depending on the disc. For details, refer to the instructions provided with disc.

Searching for a desired scene, starting playback from a specified time

You can search for a desired scene by specifying a title or a chapter, and the time.

❒ Chapter search and time search are not possible when disc playback has been stopped.

1 Touch [10Key Search] and then touch [Title] (title), [Chapter] (chapter), [Time] (time).



2 Touch 0 — 9 to input the desired number.
For titles, chapters
- To select 3, touch 3.
- To select 10, touch 1 and 0 in order.
- To select 23, touch 2 and 3 in order.

For time (time search)
- To select 21 minutes 03 seconds, touch [**2**], [**1**], [**Min**], and [**3**], [**Sec**] in order.
- To select 71 minutes 00 seconds, touch [**7**], [**1**], [**Min**] in order.

❒ To cancel the input numbers, touch [**Clear**].

3 While the input number is displayed, touch [Enter].
This starts playback from the selected scene.

❒ With discs featuring a menu, you can also touch [**Menu**] or [**Top Menu**] and then make selections from the displayed menu.

Entering the numerical commands

You can use this function when you need to enter a numerical command during DVD playback.

1 Touch [10Key search] and then touch [10key Mode] (10key mode).

2 Touch 0 — 9 to input the desired number. For titles, chapters or 10key mode

3 While the input number is displayed, touch [Enter].

Operating the Radio (FM)

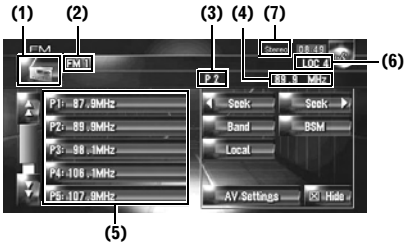
You can listen to the radio by using the navigation system. This section describes operations for Radio (FM).

Selecting [FM] as the source

1 Touch the source icon and touch [FM].

➲ For details, refer to "Selecting a source" → Page 99

Screen configuration



(1) Source icon
Shows which source has been selected.

(2) Band indicator
Shows which band the radio is tuned to FM1 to FM3.

(3) Preset number indicator
Shows what preset has been selected.

(4) Frequency indicator
Shows to which frequency the tuner is tuned.

(5) Preset list display
Shows the preset list.

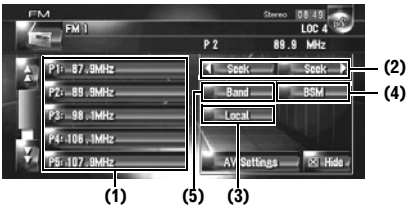
(6) LOCAL indicator
Shows when local seek tuning is on.

(7) STEREO indicator
Shows that the frequency selected is being broadcast in stereo.

Touch key operation

1 Touch the source icon and then touch [FM] to select the radio (FM).
When the source icon is not displayed, you can display it by touching the screen.

Touch keys



(1) Touch: Selecting a desired frequency from the list
Touch to recall the preset frequency.

❒ To register the frequency currently being received to the preset list, touch and hold the preset list.

Touch and hold: Storing broadcast stations
You can register the frequency currently being received to the preset list. You can easily store up to six broadcast frequencies for later recall with the touch of a key.

❒ Touch to recall the preset frequency.

❒ Up to 18 stations, 6 for each of three FM bands can be stored in memory.

(2) Touch: Perform manual tuning
To perform manual tuning, touch Seek or Seek briefly. The frequencies move up or down step by step.

Touch and hold: Perform seek tuning
To perform seek tuning, keep touching Seek or Seek for about one second and release. The tuner will scan the channels until a broadcast strong enough for good reception is found.

❒ You can cancel seek tuning by touching either Seek or Seek briefly.

❒ If you keep touching Seek or Seek, you can skip broadcasting channels. Seek tuning starts as soon as you release the keys.

❒ You can also perform these operations by using the **TRK (◄/►)** button.

(3) Tuning in strong signals

➲ "Tuning in strong signals" ➞ Page 110

(4) Storing the strongest broadcast frequencies

➲ "Storing the strongest broadcast frequencies" ➞ Page 112

(5) Select a FM band
Touch [**Band**] repeatedly until the desired FM band is displayed, **FM 1**, **FM 2** or **FM 3**.

❒ This function is convenient to prepare different preset list for each band.

Storing the strongest broadcast frequencies

BSM (best stations memory) lets you automatically store the six strongest broadcast frequencies under preset tuning keys **P1** — **P6** and once stored there you can tune in to those frequencies with a touch of the key.

1 Touch and hold [BSM].
BSM starts. The six strongest broadcast frequencies will be stored under preset tuning keys **P1** — **P6** in order of their signal strength.

❒ To cancel the storage process, touch [**Cancel**].

❒ Storing broadcast frequencies with **BSM** may replace broadcast frequencies you have saved using **P1** — **P6**.

Tuning in strong signals

Local seek tuning lets you tune in only those radio stations with sufficiently strong signals for good reception.

1 Touch [Local].

2 Touch [On] to turn local seek tuning on.

❒ To turn local seek tuning off, touch [**Off**].

3 Touch ◄ or ► to set the sensitivity.
There are four levels of sensitivity for FM.
Level: **1** — **2** — **3** — **4**
The level [**4**] setting allows reception of only the strongest stations, while lower settings let you receive weaker stations.

Operating the Radio (AM)

You can listen to the radio by using the navigation system. This section describes operations for Radio (AM).

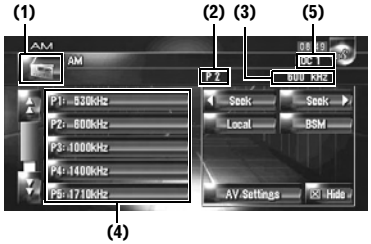
Selecting [AM] as the source

1 Touch the source icon and touch [AM].

➲ For details, refer to "Selecting a source" → Page 99

Screen configuration

Radio (AM)



(1) Source icon
Shows which source has been selected.

(2) Preset number indicator
Shows what preset has been selected.

(3) Frequency indicator
Shows to which frequency the tuner is tuned.

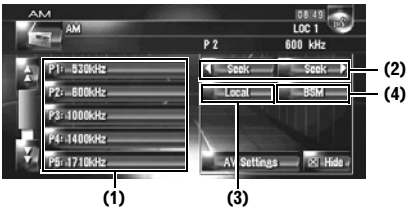
(4) Preset list display
Shows the preset list.

(5) LOCAL indicator
Shows when local seek tuning is on.

Touch key operation

1 Touch the source icon and then touch [AM] to select the radio (AM).
When the source icon is not displayed, you can display it by touching the screen.

Touch keys



(1) Selecting a desired frequency from the list
Touch to recall the preset frequency.

❒ To register the frequency currently being received to the preset list, touch and hold the preset list.

Touch and hold: Storing broadcast stations
You can register the frequency currently being received to the preset list. You can easily store up to six broadcast frequencies for later recall with the touch of a key.

❒ Touch to recall the preset frequency.

❒ Up to 6 stations can be stored in memory.

(2) Touch: Perform manual tuning
To perform manual tuning, touch Seek or Seek briefly. The frequencies move up or down step by step.

❒ You can also perform manual tuning by pressing the **TRK (◄/►)** button.

Touch and hold: Perform seek tuning
To perform seek tuning, keep touching Seek or Seek for about one second and release. The tuner will scan the channels until a broadcast strong enough for good reception is found.

❒ You can cancel seek tuning by touching either Seek or Seek briefly.

❒ If you keep touching Seek or Seek, you can skip broadcasting channels. Seek tuning starts as soon as you release the keys.

❒ You can also perform seek tuning by keep pressing the **TRK (◄/►)** button.

(3) Tuning in strong signals

➲ "Tuning in strong signals" ➞ Page 110

(4) Storing the strongest broadcast frequencies

➲ "Storing the strongest broadcast frequencies" ➞ Page 112

Storing the strongest broadcast frequencies

BSM (best stations memory) lets you automatically store the six strongest broadcast frequencies under preset tuning keys **P1** — **P6** and once stored there you can tune in to those frequencies with the touch of a key.

1 Touch and hold [BSM].

BSM starts. The six strongest broadcast frequencies will be stored under preset tuning keys **P1** — **P6** in order of their signal strength.

- ❒ To cancel the storage process, touch [**Cancel**].
- ❒ Storing broadcast frequencies with **BSM** may replace broadcast frequencies you have saved using **P1** — **P6**.

Tuning in strong signals

Local seek tuning lets you tune in only those radio stations with sufficiently strong signals for good reception.

1 Touch [Local].

2 Touch [On] to turn local seek tuning on.

- ❒ To turn local seek tuning off, touch [**Off**].

3 Touch ◄ or ► to set the sensitivity.

There are two levels of sensitivity for AM.
Level: **1** — **2**
The level [**2**] setting allows reception of only the strongest stations, while lower settings let you receive weaker stations.

Using the AV Source (Music Library)

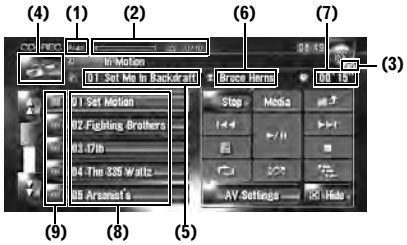
You can record tracks from a music CD to the hard disk in the navigation system. The music library function enables you to record music CDs on the hard disk in the navigation system and play them back in various methods. To use the music library, start by recording sound sources from the CD.

Music Library Recording

When you play back a music CD that is not recorded on the navigation system, the system automatically begins recording that CD to the music library. This section describes cautions and recording procedure.

❒ The music library can record up to 200 general music CDs worth of music data. (This is just an average number and varies depending on the size of music data contained in the CDs.)

CD recording screen (e.g. Auto mode)



(1) Recording mode indicator
Shows the current recording mode. Fractions show number of recorded tracks total number of tracks in the CD.

➲ Setting **REC Mode** ➞ Page 156

(2) Record progress indicator
Shows the progress of the recording. Fractions show number of recorded tracks total number of tracks in the CD.

(3) Record indicator
Shows the recording status. ⓡ (Red) indicates that recording is in progress. ⓡ (Blue) indicates preparing recording.

(4) Source icon
Shows which source has been selected.

(5) Track indicator
Shows the track number and track title currently playing.

(6) Artist name indicator
Shows the artist name currently playing.

(7) Play time indicator
Shows the elapsed playing time of the current track.

(8) Track list
Shows tracks of the CD.

(9) Record status of tracks
♪ : Recorded track
REC (Red): Track being recorded
REC (Blue): Track is not recorded yet

❒ Track selection operation or special playback functions such as random play are disabled until recording finishes. To select tracks or perform special playback functions, touch [**Stop**] to stop recording.

Title display
Music recognition technology and related data are provided by Gracenote®. Gracenote is the industry standard in music recognition technology and related content delivery. For more information visit www.gracenote.com.

❒ A title information will be displayed when the information is found in the Gracenote® Database on the built-in hard disk drive.

❒ When multiple options of title information is find or no title information exists, [–] is displayed. A title may be displayed if you update the title information manually after recording has finished.

➲ "Editing a playlist or tracks" ➞ Page 120

❒ If no title information exists in the Gracenote® Database on the built-in hard disk drive, the date when the track was recorded is entered automatically. If you want to display the title information, enter the title manually after recording has finished.

- ❒ Changing the title of the playlist or track → Page 108
- ❒ The title information displayed on the CD playback screen and the recording screen is synchronized with the one edited in the music library. If you edit the title information in the music library, the title displayed on each screen will change accordingly.
- ❒ Title information can only be edited when one or more tracks in a disc is recorded in the music library.
- ➲ "Editing the playlist" → Page 120

Recording all tracks in a CD

When you play back a CD that is not recorded, it is automatically recorded in the music library (hard disk drive).

- ❒ All tracks are automatically recorded (**Auto**) in the default setting.
- ➲ Switching the recording mode (**REC Mode**) → Page 156

1 Insert the CD that you want to record.

Recording automatically starts.

- ❒ To cancel the recording, touch [**Stop**].

When recording finishes, the system returns to the normal playback screen of the CD in the blank between current track and next track.

- ❒ If the CD is scratched or damaged, no data can be recorded on that part. In such a case, the track that falls on that part may be skipped.

Recording a CD manually

You can record only your favorite tracks in the CD.

1 [REC Mode] is set to [Manual].

- ➲ Switching the recording mode → Page 156
- ❒ The **REC Mode** cannot be changed during recording.

2 Play back the track you want to record.

3 Touch [REC].

The track being played is recorded.

When recording finishes, the system returns to the normal playback screen of the CD in the end of the track.

- ❒ To cancel the recording, touch [**Stop**].

Recording only the first track of a CD

You can record only the first track of the CD. This mode is useful when you want to record only the first tracks from multiple CD singles (or EPs) consecutively.

1 [REC Mode] is set to [Single].

- ➲ Switching the recording mode → Page 156
- ❒ The **REC Mode** cannot be changed during recording.

2 Insert the CD you want to record.

Recording automatically stars for the first track.

When recording finishes, the system returns to the normal playback screen of the CD in the end of the track.

- ❒ To cancel the recording, touch [**Stop**].

Stopping CD recording

You can stop recording while recording a CD. (Recording can resume depending on the recording mode.)

1 Touch [Stop].

When REC Mode is [Auto] or [Single]:

Recording is paused, and the system starts normal CD playback. To resume recording, touch [**REC**]. Recording also resumes in the following cases:

— When you switch to another source, and then return to the CD source.

— When you turn off the ignition switch of the vehicle, and then restart the engine.

When REC Mode is [Manual]:

Recording is stopped. Touch [**REC**] to record the track being played.

Notes on CD recording

- ❒ Operations on the navigation system may take more time during recording than normal.
- ❒ Tracks from a CD are recorded in 4 times speed. You can listen to that sound during recording.
- ❒ The data is recorded using a highly efficient compression method, so the sound may slightly differ from the original depending on the sound source. Noise may be heard in some cases, but this is not an malfunction.
- ❒ Recording is possible only with a CD that contains 44.1 kHz, 16-bit-stereo PCM digital audio data.
- ❒ Recording (or copying) to the music library is not possible from recording media (such as CD-Rs) in which a CD or other data is digitally stored. This is due to the Serial Copy Management System (SCMS) that was developed to prevent second-generation or serial copies.
- ❒ Recording to the music library is not possible from media (such as CD-Rs) in which MP3 files are stored.
- ❒ When you are recording a CD with no track intervals (such as a live concert CD), if the engine stops and the power turns off, the sound may break in a track when the music data is played back.

Notes for Hard disk drive

Recording equipment and copyright

Recording equipment should be used only for lawful copying and you are advised to check carefully what is lawful copying in the country in which you are making a copy. Copying of copyright material such as films or music is unlawful unless permitted by a legal exception or consented to by the right owners.

About writing data to the hard disk drive at low temperature

Writing to the hard disk drive such as recording music to the music library may be disabled when the navigation system detects abnormally low temperatures inside the vehicle. Functionality will become available once the temperature inside the vehicle returns to normal.

When recording please pay attention to these points;

- Pioneer does not compensate for contents that cannot be recorded or any loss of recorded data due to a malfunction or failure of the navigation system.
- The data recorded on the navigation system cannot be used without permission from its right holder under copyright law except for personal entertainment.
- Make sure to check the recording operation before recording and check the recorded contents after recording.
- Recording is not guaranteed for all CDs.

About the data saved or recorded by the customer

- The data saved or recorded onto this navigation system by the customer cannot be extracted from the navigation system, and those service cannot be accepted.
- The data saved or recorded onto this navigation system by the customer cannot be guaranteed during repair or service. Lost data that was saved or recorded by the customer is not guaranteed.
- Due to copyrights, the music data recorded into the Music Library cannot be backed up during repair or service.

Music Library Play

You can play back or edit the tracks recorded in the hard disk drive in the source named music library (**LIBRARY**).

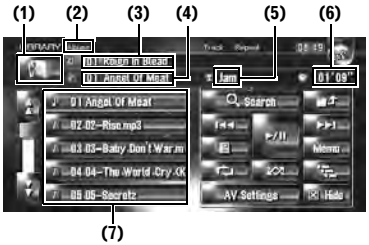
Selecting [LIBRARY] as the source

1 Touch the source icon and touch [LIBRARY].

For details, refer to "Selecting a source" → Page 99

Screen configuration

Music Library (LIBRARY)



(1) Source icon
Shows which source has been selected.

(2) Group name indicator
Shows the group currently playing.

(3) Playlist name indicator
Shows the playlist currently playing.

(4) Track name indicator
Shows the track currently playing.

(5) Artist name indicator
Shows the artist name currently playing.

(6) Play time indicator
Shows the elapsed playing time of the current track.

(7) Track list and playlist
Shows the track list or the playlist currently playing or temporary displayed.

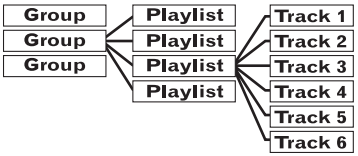
Title display

Music recognition technology and related data are provided by Gracenote®. Gracenote is the industry standard in music recognition technology and related content delivery. For more information visit www.gracenote.com.

- ❒ If no title information exists in the Gracenote® Database on the built-in hard disk drive, the date when the track was recorded is entered automatically. If you want to display the title information, enter the title manually after recording has finished.
- ➲ "Changing the title of the playlist or track" → Page 122

Relationship of groups, playlists, and tracks

The music library is organized as follows with three levels:groups, playlists, and tracks.



There are four types of groups:

Album group ([Albums]):
Stores the recorded track data in its original order. One playlist is automatically created when a CD is recorded.

Artist group ([Artists]):
Stores playlists in which tracks are sorted by artist names.

Genre group ([Genres]):
Stores playlists in which tracks are sorted by genres.

My Favorite group ([My Favorites]):
Stores the playlists registered in My Favorites.

Maximum number you can register

Group	Playlist	Tracks for a playlist
Albums	400	99
Artists	400	400
Genres	13	400
My Favorites	5	99

If you try to record new one more than above, the oldest playlist will be deleted.

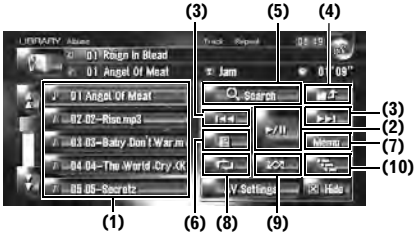
Touch key operation

Listening to a track recorded in the Music Library

1 Touch the source icon and then touch [LIBRARY].

When the source icon is not displayed, you can display it by touching the screen.

Touch keys



(1) Selecting a desired track from the list
Touch a desired track to play.

❒ Touching ▲ or ▼ switches to the next or previous page in the list.

(2) Playback and Pause
Touching ►/II switches between [playback] and [pause].

(3) Touch: Skip the track forward or backward
Touching ►►I skips to the start of the next track. Touching I◄◄ once skips to the start of the current track. Touching again will skip to the previous track.

Touch and hold: fast backward or forward

❒ You can also perform these operations with using the **TRK (◄/►)** button.

(4) Viewing upper contents
Touching displays the contents of the upper playlist or group.

❒ You cannot touch on the group selection screen.

➲ "Relationship of groups, playlists, and tracks" ➞ Page 116

(5) Displaying group selection screen
You can search a track from categories.

➲ Search for a playlist ➞ Page 118

(6) Displaying the details information screen
Displays the information about the track or playlist displayed in blue on the track list. On the details information, you can delete the track or edit the track information.

➲ "Editing a playlist or tracks" ➞ Page 120

(7) Touch and hold: Register the track in My Mix.

➲ "Registering a track to the My Mix playlist" ➞ Page 119

(8) Repeat play
Each touch of changes the repeat range as follows:

- **Track Repeat** — Repeat just the current track
- **Playlist Repeat** — Repeat just the current playlist
- **No display** — Repeat the currently selected group

❒ Repeat play may stop if you perform an operation that affects a track outside the repeating range during track repeat play.

❒ If you perform random play or scan play during track repeat play, the repeating range changes to **Playlist Repeat**.

(9) Playing tracks in random order
The selected tracks in the repeated range are randomly played.

❒ Random play may stop if you perform an operation that affects a track outside the repeating range or perform repeat play or scan play during track repeat play.

❒ When the range of repeat play is **Track Repeat**, if you perform random play, the repeating range changes to **Playlist Repeat**.

Indicator	Implication
Random play only	Tracks of all playlists in the group are played in random order.
[Playlist Repeat] and Random play	Tracks in the selected playlist are played in random order.

(10) Scan play
Scan play will be performed for the selected repeat range.

❒ When the range of repeat play is **Track Repeat**, if you perform scan play, the repeating range changes to **Playlist Repeat**.

❒ When you find the desired track, touch  to turn scan play off.

❒ After track or playlist scanning is finished, normal playback of the tracks will begin again.

Indicator	Implication
Scan only	The beginning of the first tracks of each playlist in the group is played for about 10 seconds.
[Playlist Repeat] and Scan play	The beginning of each track in the selected playlist is played for about 10 seconds.

Searching a track from the playlist

Once tracks are recorded, the navigation system categorizes them in a [group], and several types of playlists are automatically created. A playlist is a list that shows the playback order of tracks.

➲ "Relationship of groups, playlists, and tracks" → Page 116

Searching for an album

Select the playlist formed according to albums, and play it back.

1 Touch [Search].
The group selection screen appears.

2 Touch [Albums].



3 Touch the album name (Album playlist) you want to play back.



The first track in the selected playlist is displayed.

Searching the playlist by artist

Select the playlist formed according to artists, and play it back.

1 Touch [Search].
The group selection screen appears.

2 Touch [Artists].
The Artist playlist appears.

3 Touch the artist name (Artist playlist) you want to play back.



The first track in the selected playlist is played back.

Search a playlist by Genre

Select the playlist formed according to genres, and play it back.

1 Touch [Search].
The group selection screen appears.

2 Touch [Genres].
The genre playlist appears.

3 Touch the genre (genre playlist) you want to play back.



The first track in the selected playlist is played back.

Creating a playlist with a customized order

You can register your favorite tracks as a playlist, and play them back in desired order.
The My Favorites group (My Favorites) has two types of playlists.



My Mix playlist:
You can register the track being played in one action.

My Favorite 1-4 playlist:
You can register tracks from the detailed screen information.

Registering a track to the My Mix playlist

You can register the track being played to the favorite playlist called [**My Mix**].

1 Touch and hold [Memo] while playing back the track you want to register.
The track being played is registered in the **My Mix playlist**.

Registering tracks in the My Favorite 1-4 playlists

You can register tracks in the favorite playlists from [**My Favorite 1**] to [**My Favorite 4**].

Register tracks one by one

1 Play back the track you want to register.

2 Touch , then touch [Add to My Favorites].

3 Touch the playlist ([My Favorite 1] to [My Favorite 4] or [My Mix]) in which you want to register the track.



4 Touch [Yes].
The track is registered in the selected My Favorite playlist.

Registering multiple tracks at a time

1 Play back the playlist that contains the tracks you want to register.

2 Touch to display the list of playlists.

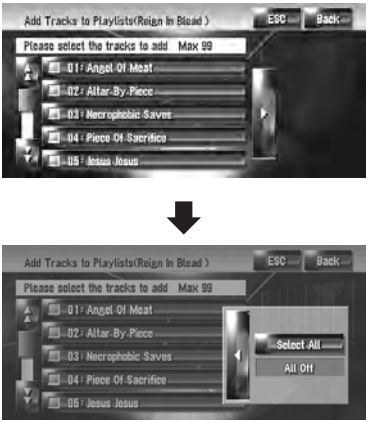
3 Touch , then touch [Add to My Favorites].
The item displayed in blue is the selected playlist.

4 Touch the playlist ([My Favorite 1] to [My Favorite 4] or [My Mix]) in which you want to register the tracks.

5 Touch the tracks you want to register.

When you touch a track, a check mark appears indicating that it is selected. To deselect it, touch the track again.

Touch ► to proceed to the next operation.



Select All:
Selects all tracks in the playlist.
All Off:
Cancels selection of all tracks in the playlist.

6 Touch [Back].

7 Touch [Yes].

The tracks are registered in the selected My Favorite playlist.

❒ Up to 99 tracks can be registered in one My Favorite playlist.

Editing a playlist or tracks

You can edit the tracks or playlist recorded in the Music library.

Only the playlists and tracks in the [**Albums**] group and the [**My Favorites**] group can be edited. [**Pronounce**] in the artist playlist can be edited.

Items that can be operated when editing a playlist

The items you can operate vary depending on the playlist being played as shown below:

- ✓ : Operation possible
- – : Operation not possible

Operatable Item	[Albums] group	[My Favorites] group	See
Edit Title	✓	✓*	P.122
Edit Pronounce	✓	✓*	P.123
Edit Artist	✓	–	P.123
Sort Playlist	✓	✓	P.123
Delete Playlist	✓	–	P.124
Delete Track	✓	✓	P.124
Update	✓	–	P.125
Add to My Favorite	✓	✓	P.119

- *: The [**My Mix**] group cannot be edited.

Items that can be operated when editing a track

The items you can operate vary depending on the track being played as shown below:

- ✓ :Operation possible
- – :Operation not possible

Operatable Item	[Albums] group	[My Favorites] group	See
Edit Title	✓	–	P.122
Edit Pronounce	✓	–	P.123
Edit Artist	✓	–	P.123
Edit Genre	✓	–	P.125
Sort Track List	–	✓	P.124
Delete Track	✓	✓	P.124
Update	✓	–	P.125
Add to My Favorite	✓	✓	P.119

Switching to the edit mode

1 Touch the playlist in the [Albums] or [My Favorites].

2 Touch the track you want to edit.

The item displayed in blue is the track currently playing.

3 Touch .

The system enters the track edit mode.



➲ "Operating the track edit mode" ➞ Page 122

4 Touch [Back] to return the previous screen.

5 Touch to return to the previous level.



The item displayed in blue is the selected playlist.

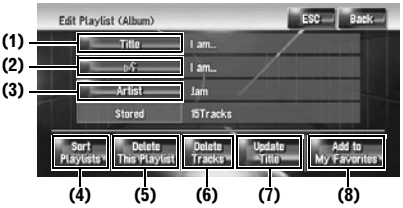
6 Touch .

The system enters the playlist edit mode.



❒ To return to the previous screen, touch [**Back**].

Operating the playlist edit mode



Album playlist:
All editing operations are possible. The edited contents will be reflected to all groups in the hard disk drive.

My Mix playlist:
Only (4), (6), and (8) can be performed.

My Favorite playlist:
Only (1), (2), (4), (6), and (8) can be performed.

(1) Entering a desired playlist title

➲ Editing the playlist title or track title ➞ Page 122

(2) Editing the pronunciation that is used as a voice command for voice recognition

➲ Editing the pronounce ➞ Page 123

(3) Entering a desired artist name

➲ Editing the artist title ➞ Page 123

(4) Sorting playback order of the playlists

➲ Changing playback order of the playlist or track ➞ Page 123

(5) Deleting the playlist from the hard disk drive

(6) Deleting the selected tracks from that playlist

➲ Delete some tracks at once ➞ Page 124

(7) Updating Album title information

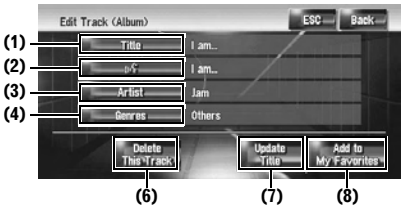
➲ Updating the album title and track title ➞ Page 125

(8) Adding the selected tracks to My Favorite

➲ Registering the track to My Favorite ➞ Page 119

Operating the track edit mode

Album playlist:
All items can be edited except for (5). The edited contents will be reflected to all groups in the hard disk drive.



My Mix playlist, My Favorite playlist:
Only (5), (6), (8) can be performed.



(1) Entering a desired track title

➲ Editing the playlist title or track title ➞ Page 122

(2) Editing the pronunciation that is used as a voice command for voice recognition

➲ Editing the pronounce ➞ Page 123

(3) Entering a desired artist name

➲ Editing the artist title ➞ Page 123

(4) Changing genre

➲ Changing the genre for the track ➞ Page 125

(5) Changing the order to play back tracks

➲ Changing playback order of the track ➞ Page 123

(6) Deleting this track

(7) Updating track title information

➲ Updating the album title and track title ➞ Page 125

(8) Adding the track to My Favorite

➲ Registering the track to My Favorite ➞ Page 119

Changing the title of the playlist or track

You can change titles of playlists or tracks. The titles changed here are displayed on the screen.

1 Enter the playlist edit mode or track edit mode.

➲ Displaying detailed information screen ➞ Page 117

2 Touch [Title].

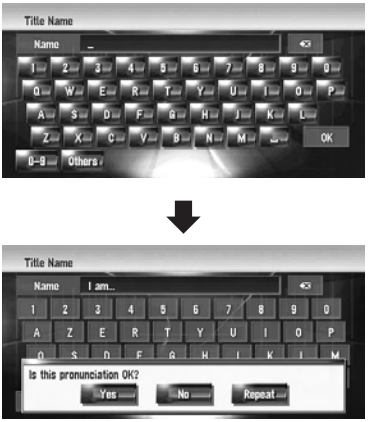
3 Touch [Yes].

The content to be changed in Step 4 can be reflected to “voice command”.

No:

Proceeds to the next step without registering it as a voice command.

4 Enter a new character string, and then touch [OK].



The system pronounces the character string once, and the pronunciation confirmation message appears. Touch [**Yes**] to fix the change.

No:

Returns to the detailed information screen.

Repeat:

You can listen to the pronunciation again.

5 Touch [Yes].

The changed character string is fixed and the system returns to the previous screen.

Changing the pronunciation of a playlist name or track name

You can change the pronunciation of playlist or track name. The pronunciation is used as a command for voice recognition.

- ❒ Only [**Pronounce**] can be edited for an artist playlist.
- ❒ The navigation system recognizes only the voice recognition character registered in the current language. If you change the interface language, the voice recognition character registered before you change the language will not be recognized.

1 Enter the playlist edit mode or track edit mode.

➲ Displaying detailed information screen → Page 117

2 Touch [Pronounce].

3 Enter a new character string, and then touch [OK].

The system pronounces the character once, and the pronunciation confirmation message appears. Touch [**Yes**] to fix the change.

No:

Returns to the detailed information screen.

Repeat:

You can listen to the pronunciation again.

4 Touch [Yes].

The changed character is fixed and the system returns to the previous screen.

Renaming an artist name in the playlist or track

You can rename the artist name in the playlist or track.

1 Enter the playlist edit mode or track edit mode.

➲ Displaying detailed information screen → Page 117

2 Touch [Artist].

3 Touch [Select from history List].

[Keyboard Input]:

The character input screen appears, and you can change the artist name with the keyboard.

4 Select an artist name from the list.

The artist name is changed to the one you selected. In the playlist edit mode, touching [**Yes**] changes the artist name to the one you selected.

Sorting the playlists

The playback order of playlists in the group can be changed.

- ❒ If there is only one playlist, the playback order cannot be changed.

1 Enter the playlist edit mode.

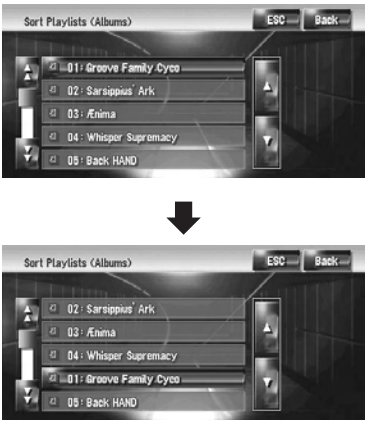
➲ Displaying detailed information screen → Page 117

2 Touch [Sort Playlists].

3 Touch the playlist that you want to change the order for.



4 Touch ▲▲, ▼▼, ▲, or ▼ to determine the position you want to put.



▲▲ ▼▼ :

Moves playlists by page.

▲ ▼ :

Moves playlists one by one.

5 Touch the selected playlist again.
The position of that playlist is fixed.

6 Repeat Step 3 to Step 5 to change the playback order of other playlists.

7 Touch [ESC].
The new order is fixed, and the system returns to the normal playback screen.

Sorting the tracks in the My Mix (My Favorites) playlist

The playback order of tracks in the My Mix playlist and the My favorites playlist can be changed.

1 Enter the track edit mode.
➲ Displaying detailed information screen ➞ Page 117

2 Touch [Sort Tracklists].

3 Touch the track that you want to change.

4 Touch , , , or to determine the destination.

5 Touch the selected track again.
The destination is fixed.

6 Repeat Step 3 to Step 5 to change the playback order of other tracks.

7 Touch [ESC].
The new order is fixed, and the system returns to the normal playback screen.

Deleting a playlist

You can delete a playlist in the Album group. (You cannot delete playlists in other groups.)

❒ If you delete a playlist in an album group, all tracks in the playlist are deleted from the hard disk drive. (They are deleted from the My Favorites group at the same time.)

1 Enter the playlist edit mode.
➲ Displaying detailed information screen ➞ Page 117

2 Touch [Delete This Playlists].

3 Touch [Yes].
The playlist is deleted.

Deleting a track from the playlist

You can delete tracks from the playlist.

❒ If you delete a track in an album group, the track is deleted from the hard disk drive. (It is deleted from the My Favorites group at the same time.)

❒ If you delete the tracks in the My Mix playlist or the My Favorite playlist, they are only deleted from the playlist, and not from the hard disk drive.

1 Enter the playlist edit mode.
➲ Displaying detailed information screen ➞ Page 117

2 Touch [Delete Tracks].

3 Touch the tracks you want to delete.
When you touch a track, a check mark appears indicating that it is selected. To deselect it, touch the track again.



Touch ► to proceed to the next operation.
Select All:
Selects all tracks in the playlist.
All Off:
Cancels the selection of all tracks in the playlist.

4 Touch [Back].

5 Touch [Yes].

Changing the genre of a track

1 Enter the track edit mode.

➲ Displaying detailed information screen ➞ Page 117

2 Select a genre from the list.



The genre is changed, and the system returns to the previous screen.

Assigning another candidate for title information

If the current title information is not desired title, you can search for another title information from Gracenote® Database in the hard disk drive manually and assign another candidate.
If there were multiple options of title information, you can select one title from them.

❒ Music recognition technology and related data are provided by Gracenote®. Gracenote is the industry standard in music recognition technology and related content delivery. For more information visit www.gracenote.com.

Retrieving album title information

1 Select the playlist in [Album] group, and enter the playlist edit mode.

➲ Displaying detailed information screen ➞ Page 117

2 Touch [Update Title].
Information search begins. When the title information is obtaineded, the candidates screen appears.

3 Select the desired album title from the list.
The title information is updated to the one you selected.

Retrieving track title information

1 Select the playlist in [Album] group, and enter the track edit mode.

➲ Displaying detailed information screen ➞ Page 117

2 Touch [Update Title].
Information search begins. When the title information is obtaineded, the candidates screen appears.

3 Select the corresponding track title from the list.
The title information is updated to the one you selected.

> The disc updates the Gracenote® Database for the Gracenote Music recognition service on your navigation system will be available in the future.

Using the AV Source (XM, SIRIUS)

Operating to XM Satellite Radio

You can use the navigation system to control a XM satellite digital tuner, which is sold separately.
For details concerning operation, refer to the XM tuner's operation manuals. This section provides information on XM operations with the navigation system which differs from that described in the XM tuner's operation manual.

Selecting [XM] as the source

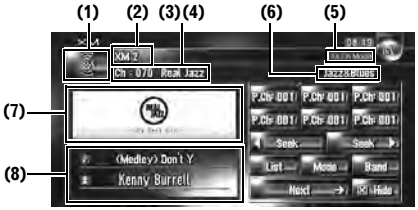
1 Touch the source icon and touch [XM].

➲ For details, refer to "Selecting a source" → Page 99

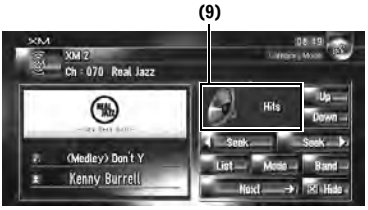
Screen configuration

GEX-P10XMT, GEX-P920XM

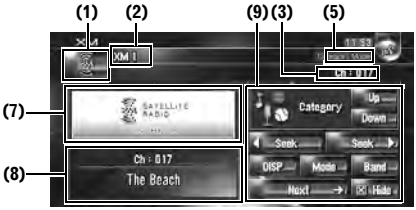
All Ch Mode



Category Mode



GEX-P910XM, GEX-P900XM



About the logo for channel name
Only the logo data that is contained in the navigation system can be displayed for each channel. The logo of a newly established channel that is not contained cannot be displayed. When no logo can be displayed, the following substitute icon is displayed.

Substitute icon



(1) Source icon
Shows which source has been selected.

(2) XM band indicator
Shows the XM band which has been selected.

(3) XM channel number indicator
Shows XM channel number the tuner is currently tuned.

(4) XM station name indicator
Shows XM broadcast station name the tuner is currently tuned.

(5) XM channel select mode indicator
Shows what channel select mode has been selected. You can select a channel from all channels in **All Ch Mode**, and select a channel from selected category in **Category Mode**.

➲ Switching the XM channel select mode → Page 128

(6) XM channel category
Shows the category of broadcast channel.

(7) XM station name logo

- ❒ The message "**-ON THE AIR-**" disappears if the navigation system cannot receive XM tuner reception for some reason.
- ❒ If you use GEX-P910XM,the logo for channel name is not available.

(8) Detail information
Shows the detail information of the broadcast channel currently being received.

(9) Category icon
Shows the category icon for the selected channel.

Touch key operation

1 Touch the source icon and then touch [XM] to select the XM.
When the source icon is not displayed, you can display it by touching the screen.

Touch keys (GEX-P10XMT, GEX-P920XM)

Page 1 (All Ch Mode)



Page 1 (Category Mode)



Page 2



Touch keys (GEX-P910XM or GEX-P900XM)



Items marked with an asterisk (*) cannot be used on GEX-P910XM or GEX-P900XM.

(1) Touch: Recalling channels from the preset
Touch to recall the preset channel.

- ❒ In **All Ch Mode**, you can also recall the preset channel by pressing the **P.LIST (▲/▼)** button.
- ❒ In **Category Mode**, the screen shows category search.

Touch and hold: Storing broadcast stations
You can register the channel currently being broadcast to the preset list.

- ❒ Up to 18 stations, 6 for each of three XM bands can be stored in memory.
- ❒ If you use GEX-P910XM or GEX-P900XM, the channel number does not appear on the touch key.

(2) Perform manual tuning
The channels move up or down step by step.

- ❒ If you keep touching Seek or Seek you can skip broadcasting channels.
- ❒ You can also perform these operations by using the **TRK (◄/►)** button.

(3) Switching to the list display*
You can select a desired channel from the list display.

➲ Selecting a channel from the XM channel list display ➞ Page 129

(4) Switching the XM channel select mode
You can switch the mode between the two methods for selecting and listing the channel.

All Ch Mode :
You can select a channel from all channels when you operate.

Category Mode :
You can select a channel within selected category when you operate.

(5) Select a XM band
Touch [**Band**] repeatedly until the desired XM band is displayed, **XM 1**, **XM 2** or **XM 3**. This is useful for switching the preset.

(6) Switching the touch keys to next page

(7) Memorizing the current song*
The song title and artist name being broadcast will be memorized in My Mix. When the song that matches the song information memorized in My Mix is broadcast, you can tune the channel to the one that is broadcasting that song.

➲ "Using the My Mix function" ➞ Page 130

(8) Setting the notification of the memorized tracks*
You can set the song information memorized in My Mix. You can also delete the memorized song.

➲ Setting the notification of the memorized tracks ➞ Page 130

➲ Deleting the memorized tracks ➞ Page 130

(9) Selecting a XM channel directly
You can select a XM channel directly by entering the desired channel number.
Enter the channel number, touch [**Enter**], and then touch [**Back**].

❒ To cancel the input numbers, touch [**Clear**].

❒ This function in not available with GEX-P900XM.

(10) Switching the touch keys to previous page

(11) Switching the channel category
Touch [**Up**] or [**Down**] to select the desired category.

(12) Switching the XM information
Each touch of [**Disp**] changes the display on the bottom of the detail information as follows:

GEX-P900XM:
Channel name — Artist name/feature — Song/program title — Information — Channel number

GEX-P910XM:
Channel name — Artist name/feature — Song/program title — Channel category

❒ This function is not available with GEX-P10XMT and GEX-P920XM.

Display the Radio ID

If you select CH: 000, the Radio ID is displayed.

1 Touch [10Key Direct].

2 Input [000] and then touch [Enter].
If you select another channel, display of the Radio ID is canceled.

❒ You can also display the Radio ID to select [**RADIO ID**] from channel category in the **Category Mode**.

Selecting a channel from the XM channel list display

The list content can be switched so you can search for the track you want to listen to not only by the channel name but also by the artist name or song title.

❒ The channel list shows all channels during the **All Ch Mode**, and the channels included in the selected category during the **Category Mode**. To switch the channel mode, touch [**Mode**].

1 Touch [List].
XM channel list appears in the display.
Each touch of the [**List**] changes the settings as follows:
Detail information display — Ch Name List (Channel name) — Song Title List (Song title) — Artist Name List (Artist name)

2 Touch the desired channel that you want to listen to.

Touch  or  to switch to the next page or previous page.

❒ During the **Category Mode**, touch [**Up**] or [**Down**] to switch to another category.

Using the My Mix function

The My Mix function memorizes the song title and artist name of the song currently being received. When the song that matches the memorized song title and artist name is being broadcast on a station other than the one you are listening to, you will be alerted, and you can switch the station to listen to that song.

❒ A track itself is NOT downloaded BUT only the song title and the artist name are memorized.

Memorizing the song title and the artist name of a song

The song title and artist name of the song you are listening to can be memorized.

1 Touch and hold [Memo] for two seconds or more.

The song title and artist name of current song you are listening to are memorized, and a confirmation message appears.

❒ The song title and artist name of up to 15 songs can be memorized. Trying to save more than 15 songs will overwrite old ones.

❒ The song title or the artist name cannot be memorized when [--------] is displayed on the title information.

❒ This function invalid for the channel 000.

❒ There is a possibility the memorized title is not displayed correctly.

When the memorized song is broadcast

Alert message is displayed. Touch [**Yes**] to switch to that station, and you can listen to that track.

❒ If the memorized song is not selected in the My Mix list, no notification will be provided even when that song is broadcast.

❒ Alert may not be provided depending on the situation of the navigation system.

➲ Setting the notification of the memorized track ➞ Page 130

❒ If there is slight difference between the memorized title and the title of the song being broadcast, no notification will be provided though they are the same song.

Setting the alert for each memorized song

You can change the setting of the alert when the track is broadcast again. You can enable or disable alert for each song.

1 Touch [Memo Edit].

You will receive alert for all items with a check mark.

2 Touch the song title that you want to exclude from the alert target.

The check mark is removed, and the song title is excluded from the alert target.

❒ If you touch that again, the check mark is put and the song title is included in the alert target.

Switching the alert setting

You can enable or disable the alert for all items with a check mark. This function will be useful when you want to turn the alert off temporarily without changing the condition of check mark.

1 Touch [Memo Edit].

2 Touch [Alert On] or [Alert Off].

If the alert setting is [**Alert Off**], My Mix is displayed on the information plate.



Deleting the memorized songs

You can delete each one of the memorized tracks from the song title list.

1 Touch [Memo Edit].

2 Touch and hold the track you want to delete.

That track will be deleted from the alert target.

❒ To delete all songs that are memorized, touch [**Delete All**].

3 A message will appear asking you to confirm the deletion. Touch [OK].

Using the direct traffic announcement function

You can listen to the memorized <Instant Traffic & Weather> channel by directly calling it up with the **T** button on the navigation unit. (Only one station can be memorized.)

Memorize a <Instant Traffic & Weather> channel

1 Tune into <Instant Traffic & Weather> channel.

2 Press and hold the T button for two seconds or more.

That <Instant Traffic & Weather> channel will be memorized.

- ❒ The channel 000 and 001 can not be memorized newly (although the channel 001 is the default).
- ❒ Even if you use the SIRIUS satellite radio tuner together, only one station can be memorized. The station memorized afterward will overwrite the existing one.

Calling up the memorized <Instant Traffic & Weather> channel

1 Press the T button.

- ❒ You can call up a <Instant Traffic & Weather> channel even from a source other than the XM source.
- ❒ To cancel the announcement, touch [**TRFC Off**] on the screen or press the **T** button again.

Operating to the SIRIUS Satellite Radio

You can use navigation system to control a SIRIUS satellite digital tuner, which is sold separately. For details concerning operation, refer to the SIRIUS tuner's operation manuals. This section provides information on SIRIUS operations with navigation system which differs from that described in the SIRIUS tuner's operation manual.

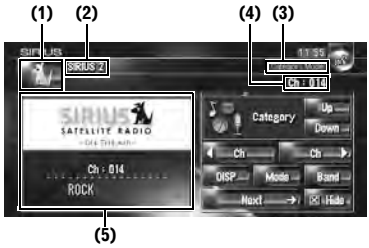
- ❒ The following functions are not available in SIR-PNR1.
  - — Selecting team for game alert
  - — Displaying game information
  - — Using the song alert function
  - — Using the direct traffic announcement function

Selecting [SIRIUS] as the source

1 Touch the source icon and touch [SIRIUS].

➲ For details, refer to "Selecting a source" → Page 99

Screen configuration



(1) Source icon
Shows which source has been selected.

(2) SIRIUS band indicator
Shows the SIRIUS band which has been selected.

(3) SIRIUS channel select mode indicator
Shows what channel select mode has been selected. You can select a channel from all channels in **All Ch Mode**, and select a channel from selected category in **Category Mode**.

➲ Switching the SIRIUS channel select mode ➞ Page 132

(4) SIRIUS channel number indicator
Shows SIRIUS channel number the tuner is tuned to.

(5) Detail information
Shows the detail information of the broadcast channel currently being received.

❒ The message "**-ON THE AIR-**" disappears if the navigation system cannot receive SIRIUS tuner reception for some reason.

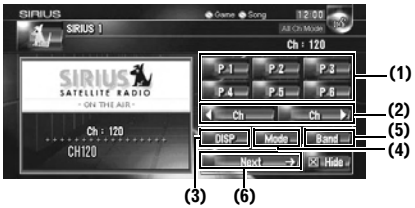
➲ "Troubleshooting" ➞ Page 184

Touch key operation

1 Touch the source icon and then touch [SIRIUS] to select the SIRIUS.
When the source icon is not displayed, you can display it by touching the screen.

Touch keys

Page 1 (All Ch Mode)



Page 2 (All Ch Mode)



Page 1 (Category Mode)



Items marked with an asterisk (*) cannot be used on SIR-PNR1.

(1) Touch: Recalling channels from the preset
Touch to recall the preset channel.

❒ In **All Ch Mode**, you can recall the preset channel by pressing the **P.LIST (▲/▼)** button.

❒ In **Category Mode**, the screen displays category search.

Touch and hold: Storing broadcast stations
You can register the channel currently being broadcast to the preset list.

❒ Up to 18 stations, 6 for each of three SIRIUS bands can be stored in memory.

(2) Perform manual tuning
The channels move up or down step by step.

❒ If you keep touching Ch or Ch you can skip broadcasting channels.

❒ You can also perform these operations by using the **TRK (◄/►)** button.

(3) Switching the SIRIUS display
Each touch [**DISP**] of changes the display information.
Channel number — Channel name — Channel category — Artist name/feature — Song/program title — Composer

❒ Touch and hold to switch ON/OFF the information scroll.

(4) Switching the SIRIUS channel select mode
You can switch the mode between the two methods for selecting and listing the channel.

All Ch Mode:
You can select a channel from all channels when you operate.

Category Mode:
You can select a channel within selected category when you operate.

(5) Select a SIRIUS band
Touch [**Band**] repeatedly until the desired SIRIUS band is displayed, **SIRIUS 1**, **SIRIUS 2**, or **SIRIUS 3**. This is useful for switching the preset.

(6) Switching the touch keys to next page

(7) Selecting team for game alert*
You can register your favorite team.

➲ Selecting team for game alert ➞ Page 133

➲ Switching the game alert on or off ➞ Page 133

(8) Displaying game information*
You can display game information and changes to the broadcast channel.

➲ Displaying game information ➞ Page 134

(9) Register the song as My Mix*
The song information currently broadcast will be memorized. When the song that matches the memorized song information, you can tune the channel to the one that is broadcasting that song.

➲ Using the song alert function ➞ Page 134

(10) Setting the notification of the memorized tracks*
You can set the memorized song information. You can also delete the memorized song.

➲ Setting the notification of the memorized tracks ➞ Page 135

➲ Deleting the memorized songs ➞ Page 135

(11) Selecting a SIRIUS channel directly
The Channel number input screen appears. You can select a SIRIUS channel directly by entering the desired channel number.
While the input number is displayed, touch [**Enter**], and then touch [**Back**].

❒ To cancel the input numbers, touch [**Clear**].

(12) Switching the touch keys to previous page

(13) Switching the channel category
Touch [**Up**] or [**Down**] to select the desired category.

Selecting team for Game Alert

This navigation system can alert you when games involving your favorite teams are about to start. To use this function you need in advance to set the game alert to the teams.

1 Touch [Game Alert].
The League/Team Setting screen appears.

2 Touch [Next] or [Previous] to select the league.



3 Touch [Next] or [Previous] to select the team.

4 Touch [On/Off].
The team displayed as [**On**] is the alert target.



5 Touch [Alert On].

❒ When the selected team is excluded from the alert target, the team is displayed as [**Off**]. Up to 12 teams can be selected when you have already made 12 team selections, **Full** is displayed and additional team selection is not possible. In this case, first delete the team selection and then try again.

Switching the Game Alert on or off

You can enable or disable the alert for selected items. This function will be useful when to turn the alert off temporarily without changing the setting of each selected team.

1 Touch [Game Alert].
The League/Team Setting screen appears.

2 Touch [Alert On] or [Alert Off].

When the game involving team is broadcast

A message is displayed. Touch [**Jump**] to switch to that station, and you can view to that game information. If you touch [**Stay**], the channel does not switch.

- ❒ Alert may not be provided depending on the situation of the navigation system.

Displaying game information (Game Info)

You can display the game information of the team to which you have set an alert, and change to the broadcast channel.

- ❒ This function is unavailable if no team is selected in the game alert function.

1 Touch [Game Info].
The game name and the broadcast channel are also displayed.

2 Touch [Next] or [Previous] to view the game score information which is registered.

- ❒ The game score will be updated automatically.
- ❒ Touch [**Tune To**] to switch to the channel that broadcasts the displayed game.
- ❒ If you have not made any team selections, **Not Set** is displayed.
- ❒ When games involving your favorite teams are not currently playing, **No Game** is displayed.

Using the My Mix function

The My Mix function memorizes the song title and artist name of the song currently being received. When the track that matches the memorized song title and artist name is being broadcast on a station other than the one you are listening to, you will be alerted, and you can switch the station to listen to that song.

- ❒ A track itself is NOT downloaded BUT only the song title and the artist name are memorized.

Memorizing the song title and the artist name of a song

The song title and artist name of current song you are listening to can be memorized.

1 Touch and hold [Memo].
The song title and artist name of the song you are listening to are memorized, and [**Song Saved**] is displayed.

- ❒ The song title and artist name of up to 10 tracks can be memorized. If you try to save more than 10 tracks [**FULL**] is displayed.
- ❒ You cannot memorize the song without the song title information or the artist name information.
- ❒ There is a possibility the memorized title is not displayed correctly.

When the memorized song is broadcast

Alert message is displayed. Touch [**Jump**] to switch to that station, and you can listen to that track. If you touch [**Stay**], the cannel does not switch.

- ❒ If the memorized song is not selected in the song alert list, no notification will be provided even when that track is broadcast.
- ❒ Notification may not be provided depending on the situation of the navigation system.
- ➲ Setting the notification of the memorized track → Page 135
- ❒ If there is slight difference between the memorized title and the title of the track being broadcast, no notification will be provided though they are the same song.

Setting the alert for each memorized song

You can change the setting of the alert when the track is broadcast again. You can enable or disable alert for each song.

1 Touch [Memo Edit].
You will receive alert for all items with a check mark.

2 Touch [Previous] and [Next] to select the song title that you want to exclude from the alert target.

3 Touch [On/Off].
The song title displayed as [**On**] is the alert target. When the song title is excluded from the alert target, the song title is displayed as [**Off**].

4 Touch [Alert On].

Switching the alert on or off

You can enable or disable the alert for selected items.
This function will be useful when you want to turn the alert off temporarily without changing the condition of each memorized song.

1 Touch [Memo Edit].

2 Touch [Alert On] or [Alert Off].

Deleting the memorized songs

You can delete each one of the memorized tracks from the song title list.

1 Touch [Memo Edit]

2 Touch [Delete This Song] when the track you want to delete is displayed.
That track will be deleted from the alert target.

3 A message will appear asking you to confirm the deletion. Touch [Yes].

Using the Traffic & Weather preset function

You can listen to the memorized Traffic & Weather channel by directly calling it up with the **T** button on the navigation system. (Only one station can be memorized.)

Memorize a Traffic & Weather channel

1 Tune into the Traffic & Weather channel.

2 Press and hold the T button for two seconds or more.
That Traffic & Weather channel will be memorized.

❒ Even if you use the XM satellite radio tuner together, only one station can be memorized. The station memorized afterward will overwrite the existing one.

Calling up the memorized Traffic & Weather channel

1 Press the T button.

❒ You can call up a Traffic & Weather channel even from a source other than the SIRIUS source.

❒ To cancel the announcement, touch [**TRFC Off**] on the screen or press the **T** button again.

Using the AV Source (M-CD, iPod®, TV)

When Pioneer audio equipment is connected to the navigation system using IP-BUS or AV-BUS, such equipment can be operated from the navigation system. This chapter describes the operation of the audio source that can be used when the Pioneer audio equipment is connected. When reading this chapter, please also refer to the operation manual of the AV equipment connected to the navigation system.

Operating the Multi-CD Player

You can use the navigation system to control a multi-CD player, which is sold separately.

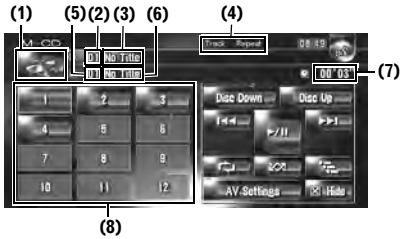
❒ Only those functions described in this manual are available for multi-CD player. (Depending on the multi-CD player, the function may be invalid.)

Selecting [M-CD] as the source

1 Touch the source icon and touch [M-CD].

➲ For details, refer to "Selecting a source" → Page 99

Screen configuration



(1) Source icon
Shows which source has been selected.

(2) Disc number indicator
Shows the disc currently playing.

(3) Disc title indicator*
Shows the disc title currently playing.

(4) Repeat range indicator
Shows which repeat range has been selected.

(5) Track number indicator
Shows the track currently playing.

(6) Track title indicator*
Shows the track title currently playing.

(7) Play time indicator
Shows the elapsed playing time of the current track.

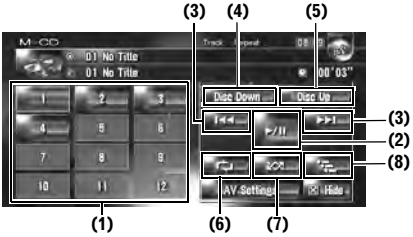
(8) Disc number display
Shows the disc number in multi-CD player.

❒ The titles of the items marked with an asterisk (*) will be displayed only when the CD TEXT disc is used. When using a normal music CD, they are displayed as [–].

Touch key operation

1 Touch the source icon and then touch [M-CD] to select the multi-CD player.
When the source icon is not displayed, you can display it by touching the screen.

Touch keys



❒ When the multi-CD player has performed the preparatory operations, **Ready** is displayed.

❒ If the multi-CD player does not operate properly, an error message such as **Error-XX** may be displayed. Refer to the multi-CD player owner's manual.

❒ If there are no discs in the multi-CD player magazine, **No Disc** is displayed.

(1) Changing the disc in the magazine

(2) Playback and Pause
Touching ►/II switches between [playback] and [pause].

(3) Touch: Skip the track forward or backward
Touching ►►I skips to the start of the next track. Touching I◄◄ once skips to the start of the current track. Touching again will skip to the previous track.

Touch and hold: fast backward or forward
Keep touching I◄◄ or ►►I to perform fast backward or forward.

❒ You can also perform these operations by using the **TRK (◄/►)** button.

(4) Playing back the previous disc
The disc previous to the currently played disc will be played.

(5) Playing back the next disc
The disc next to the currently played disc will be played.

(6) Repeating play
Each touch of  changes the settings as follows:
Track Repeat — Repeat just the current track
Disc Repeat — Repeat the current disc

❒ If you select other discs during repeat play, the repeat play range setting will be canceled.

❒ If you perform track search or fast forward/rewind during **Track Repeat**, the repeat play range changes to **Disc Repeat**.

(7) Playing tracks in random order
Tracks will play in a random order within the previously selected repeat ranges.

Indicator	Implication
[Random] only	Tracks of all disc in the magazine are played in random order.
[Disc Repeat] and [Random]	Tracks in the selected disc are played in random order.

❒ If you perform random play during [**Track Repeat**], the repeat play range changes to [**Disc Repeat**].

(8) Scanning play
The first 10 seconds of each track of the current disc (or the first track of each disc) is played.

Indicator	Implication
[Scan] only	The beginning of the first tracks of each disc is played for about 10 seconds.
[Disc Repeat] and [Scan]	The beginning of each track in the selected disc is played for about 10 seconds.

❒ When you find the desired track (or disc) touch  to turn scan play off.

❒ After track or disc scanning is finished, normal playback of the tracks will begin again.

Operating the iPod®

You can control an iPod by combining the Pioneer iPod adapter (sold separately) to the navigation system. For details concerning operation, refer to the owner's manual of iPod adopter. This section provides information on iPod operations with the navigation system that differ from those described in the owner's manual of iPod adopter.

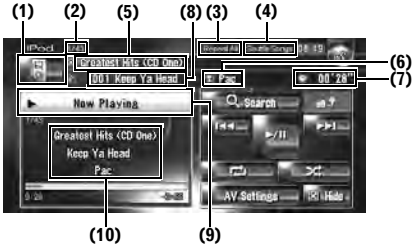
❒ When you use the iPod (sold separately) with this Navigation System, Pioneer iPod adapter is required.
iPod is a trademark of Apple Computer, Inc., registered in the U.S. and other countries.

Selecting [iPod] as the source

1 Touch the source icon and touch [iPod].

➲ For details, refer to "Selecting a source" → Page 99

Screen configuration



(1) Source icon
Shows which source has been selected.

(2) Song number indicator
Shows the number of song playing in the selected list.

(3) Repeat play indicator
Shows whether Repeat is selected for the current song or all song on current list.

(4) Shuffle play indicator
Shows whether Shuffle play is selected for songs of albums.

(5) Album title indicator
Shows the album title of the song.

(6) Artist name indicator
Shows the artist name of the current song.

(7) Play time indicator
Shows the elapsed playing time of the current song.

(8) Song title indicator
Shows the title of the current song.

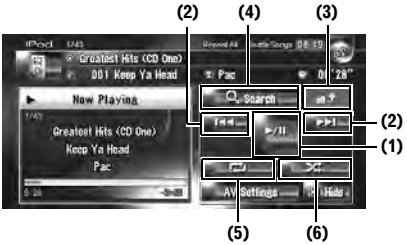
(9) Playing Song Information
Shows the information and status of the current song.

(10) Song title, Artist name, and Album title indicator
When playing a song, Song title, Artist name, and Album title are displayed.

Touch key operation

1 Touch the source icon and then touch [iPod] to select the iPod.
When the source icon is not displayed, you can display it by touching the screen.

Touch keys



(1) Playback and Pause
Touching ►/❚❚ switches between [playback] and [pause].

(2) Touch: Skip back or forward to another song
Touching ►►| skips to the start of the next song. Touching |◄◄ once skips to the start of the current song. Touching again will skip to the previous song.

Touch and hold: fast forward or rewind

❒ You can also perform these operation with pressing the **TRK (◄/►)** button.

(3) Displaying the previous screen
Touch on the refine search or other screen to return to the previous screen.

➲ "Browsing for a song" → Page 140

(4) Narrowing down the tracks to play back
You can narrow down the choices of songs to play from five categories.

➲ "Browsing for a song" ➞ Page 140

(5) Repeating play
Touch repeatedly until the desired repeat range appears in the display.
- **Repeat One** — Repeat just the current song
- **Repeat All** — Repeat all songs in the selected list

(6) Shuffle play
This function shuffles songs or albums and plays them in random order.
Each touch of changes the settings as follows:
- **Shuffle Songs** — Play back songs in random order within the selected list
- **Shuffle Albums** — Selected an album randomly, and then play back all songs in that album in order

Browsing for a song

The operations for controlling an iPod with this navigation system are designed to be close to iPod operation. This allows you to search and play songs as you would with an iPod.

1 Touch [Search].
If you do nothing about 30 seconds after the Step 1 to the Step 4 is done, actual screen returns to the previous screen.

2 Touch one of the categories in which you want to search for a song.
- **Playlists** (playlists)
- **Artists** (artists)
- **Albums** (albums)
- **Songs** (songs)
- **Genres** (genres)



The search screen is displayed.
The icon on the left indicates that the item is a [Playlist], and the icon indicates that the item is a [Song].

❒ If you select [**Songs**], proceed to step 4.
❒ When you select **Artists**, **Albums** or **Genres** you can start a playback of all songs in the selected list. To do this, keep touching the list title.

3 Touch a list title that you want to play.
Repeat this operation until you find the desired song.
❒ To return to the previous screen touch .

4 From the song list, touch the song you want to play.
❒ To go to the next page of the list, touch .
❒ To return to the previous page of the list, touch .

Operating the TV tuner

⚠ CAUTION

- **For safety reasons, visual images cannot be viewed while your vehicle is in motion. To view visual images, you must stop in a safe place and put on the parking brake before setting your route (see page 18 Interlock for details).**

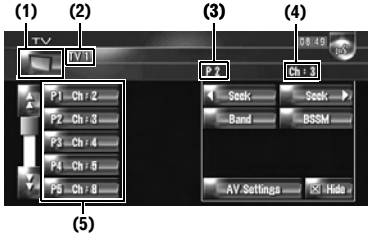
You can use the navigation system to control a TV tuner, which is sold separately. For details concerning operation, refer to the TV tuner's operation manual. This section provides information on TV operations with the navigation system that differ from those described in the TV tuner's operation manual. When you attempt to watch visual images while driving, the warning **Viewing of front seat video source while driving is strictly prohibited.** will appear on the screen.

Selecting [TV] as the source

1 Touch the source icon and touch [TV].

➲ For details, refer to "Selecting a source" → Page 99

Screen configuration



(1) Source icon
Shows which source has been selected.

(2) Band indicator
Shows which band the TV tuner is tuned to.

(3) Preset number indicator
Shows which preset has been selected.

(4) Channel indicator
Shows which channel the TV tuner is tuned.

(5) Preset list display
Shows the preset list.

Touch key operation

1 Touch the source icon and then touch [TV] to select the TV tuner.

When the source icon is not displayed, you can display it by touching the screen.

Touch keys



(1) Selecting channels from the list
The list lets you see the list of channels and select one of them to view.

- ❒ Touching ▲ or ▼ switches to the next or previous page in the list.
- ❒ You can register your favorite channels in the list.

➲ "Storing and recalling broadcast stations" → Page 142

(2) Touch: Perform manual tuning
The channels move up or down step by step.

Touch and hold: Perform seek tuning
The tuner will scan the channels until a broadcast strong enough for good reception is found.

- ❒ If you keep touching Seek or Seek you can skip broadcasting channels. Seek tuning starts as soon as you release the keys.
- ❒ You can also perform these operation by using the **TRK (◄/►)** button.

(3) Storing the strongest broadcast stations sequentially
Twelve channels with strong reception sensitivity can be registered automatically in the preset list.

➲ "Storing the strongest broadcast stations sequentially" → Page 142

(4) Change band
Touching [**Band**] switches between [**TV 1**] and [**TV 2**].

Storing and recalling broadcast stations

If you touch any of the preset tuning keys **P1** — **P12**, you can easily store up to 12 broadcast stations for later recall with a touch of the key.

1 When you find a station that you want to store in memory keep touching a preset tuning key P1 — P12.
The selected station has been stored in memory. The next time you touch the same preset tuning key **P1** — **P12** the station is recalled from memory. To switch between **P1** — **P6** and **P7** — **P12**, touch  or  . When the touch panel keys are not displayed, you can display them by touching the screen.
- ❒ Up to 24 stations, 12 for each of two TV bands can be stored in memory.
- ❒ You can also press the **P.LIST (▲/▼)** button to recall stations assigned to preset tuning keys **P1** — **P12**.

Storing the strongest broadcast stations sequentially

1 Touch and hold [BSSM].
BSSM starts. The 12 strongest broadcast stations will be stored under preset tuning keys **P1** — **P12** in order from the lowest channel up.
- ❒ To cancel the storage process, touch [**Cancel**].
- ❒ Storing broadcast stations with **BSSM** may replace current broadcast stations stored in preset memory.

Using the AV Source (AV, EXT, AUX)

Operating the AV Input source (AV)

⚠ CAUTION

- **For safety reasons, visual images cannot be viewed while your vehicle is in motion. To view visual images, you must stop in a safe place and put on the parking brake before setting your route (see page 18 Interlock for details).**

Selecting [AV INPUT] as the source

1 [AV Input] is set to [Video].

➲ Selecting the video input → Page 154

2 Touch the source icon and touch [AV INPUT].

➲ For details, refer to "Selecting a source" → Page 99

Operating the External Unit (EXT)

The term [external unit] refers to future Pioneer devices that are not currently planned for, or although devices are not fully controlled by this navigation system, devices enable control of basic functions. Two external units can be controlled by this navigation system. When two external units are connected, the navigation system allocates them to external unit 1 or external unit 2. For details concerning operation, refer to the external unit's operation manual. This section provides information on external unit operations with navigation system that differ from those described in the external unit's operation manual.

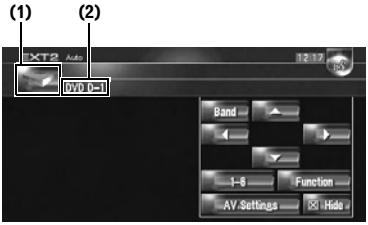
❒ Operation varies depending on the external unit connected. (In some cases, the external unit may not respond.)

Selecting [EXT 1] or [EXT 2] as the source

1 Touch the source icon and touch [EXT 1] or [EXT 2].

➲ For details, refer to "Selecting a source" → Page 99

Screen configuration



(1) Source icon
Shows which source has been selected.

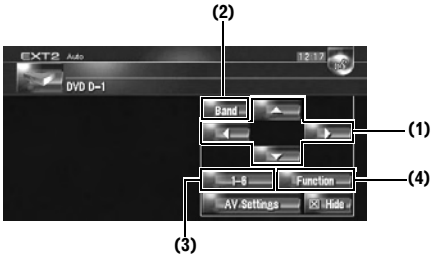
(2) External unit indicator
Displays any connected external units.

Touch key operation

1 Touch the source icon and then touch [EXT 1] or [EXT 2] to select the external unit.

When the source icon is not displayed, you can display it by touching the screen.

Touch keys



(1) Sending an ▲, ▼, ◄, or ► command
Touch to operate the external unit.

❒ Operation varies depending on the external unit connected. (In some cases, some functions may not be used until you touch and hold the key.)

(2) Sending a band command
Touch to send a band command to the external unit.

❒ Operation varies depending on the external unit connected. (In some cases, the external unit may not respond.)

(3) Sending a 1 key to 6 key command

➲ "Operate the external unit by using 1 key — 6 key" ➞ Page 144

(4) Operate the external unit by using Function 1 to Function 4 key and Auto/Manual key

➲ "Operate the external unit by using Function 1 — Function 4" ➞ Page 144

➲ "Switching the automatic and manual function" ➞ Page 144

Operate the external unit by using 1 key — 6 key

The external unit can be operated by transmitting the operating commands set to 1 key — 6 key.

1 Touch [1 — 6].

2 Touch desired key ([1 — 6]) to operate the external unit.



❒ To return to the previous screen, touch [**Back**].

❒ Operation varies depending on the external unit connected. (In some cases, some functions may not be used until you touch and hold the key.)

Operate the external unit by using Function 1 — Function 4

The external unit can be operated by transmitting the operating commands set to **Function 1** — **Function 4**.

❒ The operating commands set to **Function 1** — **Function 4** vary depending on the external unit.

1 Touch [Function].

2 Touch [Function 1, 2, 3 or 4].



The operation command is transmitted to the external unit.

❒ Some functions may not be used until you touch and hold the key.

❒ To return to the previous screen, touch [**Back**].

Switching the automatic and manual function

You can turn automatic and manual function on or off. You can switch between **Auto** and **Manual** functions of the external unit connected. Initially, this function is set to **Auto**.

❒ Operating commands set for **Auto** and **Manual** operations vary depending on the external unit connected.

1 Touch [Function].

2 Touch [Auto/Manual].
Touching [**Auto/Manual**] switches between [**Auto**] and [**Manual**].

❒ Operation varies depending on the external unit connected. (In some cases, the external unit may not respond.)

❒ To return to the previous screen, touch [**Back**].

Operating the AUX input source (AUX)

An IP-BUS-RCA Interconnector such as the CD-RB20/CD-RB10 (sold separately) lets you connect your navigation system to auxiliary equipment featuring RCA output. For more details, refer to the IP-BUS-RCA Interconnector owner's manual.

Selecting [AUX] as the source

1 [AUX Input] is set to [On].

➲ "Switching the auxiliary setting" ➞ Page 155

2 Touch the source icon and touch [AUX].

➲ For details, refer to "Selecting a source" ➞ Page 99

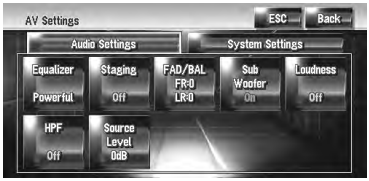
Customizing the Audio Setting related with Audio Visual

Various settings are available with the audio source according to your audiovisual requests. This chapter describes the methods of changing the various settings and how to set of the LCD panel.

AV SETTING overview

The audio visual setting is divided into [**Audio Settings**] and [**System Settings**].

Audio Settings screen



System Settings screen



➲ Operation for [**Audio Settings**] → Page 147 to 151

➲ Operation for [**System Settings**] → Page 151 to 157

❒ When **Pre Out** (the subwoofer controller setting in **System Settings** menu) is **Full**, the **Non Fading** will be displayed instead of **Sub Woofer**.

➲ "Setting the rear output and subwoofer controller" → Page 156

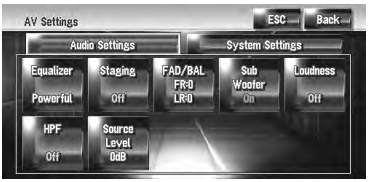
When selecting the FM tuner as the source, you cannot select [**Source Level**].

How to operate the Audio Settings screen

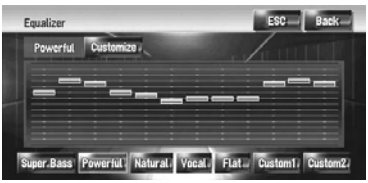
1 Press the AV button.
The Navigation screen changes to the Audio source screen (of any source).

2 Touch [AV Settings].
The AV Settings screen appears.

3 Touch the item you want to change.



4 Change Setting.
(E.g. Equalizer screen)



❒ Touch [**ESC**] to return to the selected source screen currently.

❒ Touch [**Back**] to return to the AV Settings screen.

Customizing the Audio Settings Items

Using the equalizer

The equalizer lets you adjust the equalization to match vehicle interior acoustic characteristics as desired.

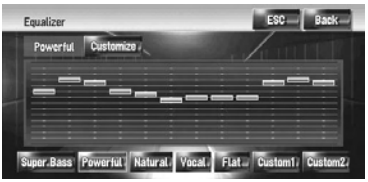
Recalling equalizer curves

There are six stored equalizer curves which you can easily recall. Here is a list of the equalizer curves:

Equalizer curve
Super Bass **Super Bass** is a curve in which only lowrange is boosted.
Powerful (Default) **Powerful** is a curve in which lowrange and highrange sounds are boosted.
Natural **Natural** is a curve in which lowrange and highrange sounds are slightly boosted.
Vocal **Vocal** is a curve in which the midrange sounds, such as the human vocal range, is boosted.
Flat **Flat** is a flat curve in which nothing is boosted.
Custom1 **Custom1** is an adjusted equalizer curve that you create. A separate custom curve can be created. Custom1 and Custom2 are adjusted equalizer curves that you create. Adjustments can be made with a 3-bandparametric equalizer.
Custom2 **Custom2** is an adjusted equalizer curve that you create. If you select this curve, the effect is reflected all audio source.

1 Touch [Equalizer] in the Audio Settings menu.

2 Touch desired equalizer.



❒ When Flat is selected, no supplement or correction is made to the sound. This is useful to check the effect of the equalizer curves by switching alternatively between Flat and a set equalizer curve.

Adjusting equalizer curves

You can adjust the currently selected equalizer curve setting as desired.

- A separate **Custom1** curve can be created for each source. If you make adjustments when a curve **Super Bass**, **Powerful**, **Natural**, **Vocal**, **Flat**, or **Custom1** is selected,the equalizer curve settings will be memorized in **Custom1**.
- A **Custom2** curve can be created common to all sources. If you make adjustments when the **Custom2** curve is selected, the **Custom2** curve will be updated.

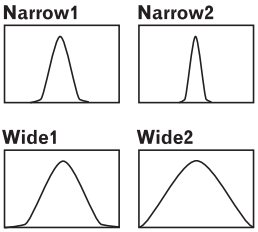
❒ The adjusted Custom1 curve is memorized for each of the source selected, but one curve is shared for the following sources.
In the built-in DVD drive, different curves can be memorized for a DVD-Video and a CD (CD-DA or MP3).

- **AM** and **FM**
- **EXT 1** and **EXT 2**
- **AUX** and **AV INPUT**

You can adjust the center frequency, level and the Q (curve characteristics) of each band (**Low**/**Mid**/**High**).



- **Band**:
  You can select the band you want to adjust.
- **Frequency**:
  You can select which frequency to be set as the center frequency.
- **Level**:
  You can adjust the decibel (dB) level of the selected band.
- **Q**:
  You can select the details of the curve characteristics. (The following figure shows the characteristic image.)



1 Touch [Equalizer] in the Audio Settings menu.

2 Touch [Customize].
The details setting screen appears.

3 Touch ◄ or ► to select the equalizer band to adjust.
Each time you touch ◄ or ► selects equalizer bands in the following order:
Low — **Mid** — **High**

4 Touch ◄ or ► to select the desired center frequency.
Low: 40 — 80 — 100 — 160 (Hz)
Mid: 200 — 500 — 1K — 2K (Hz)
High: 3.15K — 8K — 10K — 12.5K (Hz)

5 Touch ◄ or ► to adjust the level of the equalizer band.
Each time you touch ◄ or ► increases or decreases the level of the equalization band. **12dB** to **–12dB** is displayed as the level is increased or decreased.

6 Touch ◄ or ► to select the desired [Q].
Touch ◄ or ► until the desired the curve characteristics appears in the display.
Wide2 — Wide1 — Narrow1 — Narrow2
❒ To adjust other bands, repeat step 2 to step 6.

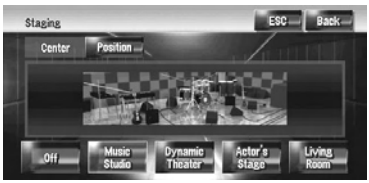
Setting the simulated sound stage

You can select the desired effect from various simulated sound stage, such as Music Studio or Dynamic Theater. You can also adjust a listener positioning effect.

Setting a stage that fits your image

1 Touch [Staging] in the Audio Settings menu.

2 Touch desired stage setting.



❒ The [**Living Room**] setting that emphasizes midrange sound hardly has any effect near the maximum volume level.
❒ When you set staging other than [**Off**], the high pass filter (**HPF**) setting turns [**Off**].
➲ "Using the high pass filter" ➞ Page 150

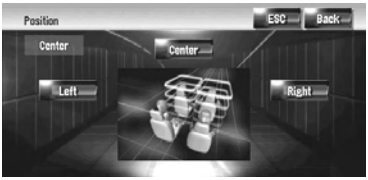
Adjusting a position effect

You can select a listener position that you want to make as the center of sound effects.

1 Touch [Staging] in the Audio Settings menu.

2 Touch [Position].

3 Touch desired position.

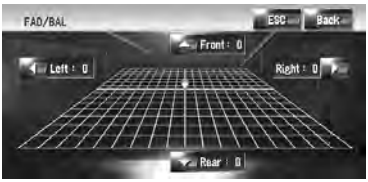


Using balance adjustment

You can select a fader/balance setting that provides an ideal listening environment in all occupied seats.

1 Touch [FAD/BAL] in the Audio Settings menu.
The FAD/BAL screen appears. When **Rear SP** (the subwoofer controller setting in **System Settings** menu) is **Sub.W**, the **Balance** will be displayed instead of **FAD/BAL**.
➲ "Setting the rear output and subwoofer controller" ➞ Page 156

2 Touch ▲ or ▼ to adjust front/rear speaker balance.
Each time you touch ▲ or ▼ moves the front/rear speaker balance towards the front or the rear.



Front: 15 to **Rear: 15** is displayed as the front/rear speaker balance moves from front to rear.
When the rear output setting is **Rear SP Sub.W**, you cannot adjust front/rear speaker balance.

➲ "Setting the rear output and subwoofer controller" ➞ Page 156

3 Touch ◄ or ► to adjust left/right speaker balance.
Each time you touch ◄ or ► moves the left/right speaker balance towards the left or the right.
Left: 9 to **Right: 9** is displayed as the left/right speaker balance moves from left to right.

Using subwoofer output

The navigation system is equipped with a subwoofer output which can be turned on or off.

❒ When the subwoofer output is on, you can adjust the cut-off frequency, the output level, and the phase of the subwoofer.

1 Touch [Sub Woofer] in the Audio Settings menu.
When **Preout** (the subwoofer controller setting in **System Settings** menu) is **Full**, you cannot select [**Sub Woofer**].
➲ Rear speaker setting ➞ Page 156

2 Touch [On] to turn subwoofer output on.
To turn subwoofer output off, touch [**Off**].

3 Touch [Reverse] or [Normal] to select the phase of subwoofer output.
❒ If subwoofer output sound is not clear with [**Normal**], change it to [**Reverse**].

4 Touch ◄ or ► to select cut-off frequency.
Each time you touch ◄ or ► selects cut-off frequencies in the following order:
50 — **80** — **125** (Hz)
Only frequencies lower than those in the selected range are output from the subwoofer.

5 Touch [+] or [–] to adjust the output level of the subwoofer.
+6 to **–6** is displayed as the level is increased or decreased.

Using non fading output

When the non fading output setting is on, the audio signal does not pass through navigation system's low pass filter (for the subwoofer), but is output through the RCA output.

1 Touch [Non Fading] in the Audio Settings menu.
Only when **Preout** (the subwoofer controller setting in **System Settings** menu) is **Full**, you can select [**Non Fading**].
➲ Rear speaker setting ➞ Page 156

2 Touch [On] to turn non fading output on.
To turn non fading output off, touch [**Off**].

3 Touch [+] or [–] to adjust the output level of the non fading.
+6 to **–6** is displayed as the level is increased or decreased.

Adjusting loudness

Loudness compensates for deficiencies in the low- and high-sound ranges at low volume.

1 Touch [Loudness] in the Audio Settings menu.

2 Touch [On] to turn loudness on.
To turn loudness off, touch [**Off**].

3 Touch ◄ or ► to select a desired level.
Each time you touch ◄ or ► selects level in the following order:
Low — **Mid** — **High**

Using the high pass filter

When you do not want low sounds from the subwoofer output frequency range to play from the front or rear speakers, turn the HPF (high pass filter) on. Only frequencies higher than those in the selected range are output from the front or rear speakers.

1 Touch [HPF] in the Audio Settings menu.

2 Touch [On] to turn high pass filter on.
To turn high pass filter off, touch [**Off**].

3 Touch ◄ or ► to select cut-off frequency.
Each time you touch ◄ or ► selects cut-off frequencies in the following order:
50 — **80** — **125** (Hz)
When **Preout** (the subwoofer controller setting in **System Settings** menu) is **Sub.W**, the **HPF** function is effective for front speakers only.

If you change the acoustic field after you set it once, the high pass filter (**HPF**) setting turns **Off**.

Adjusting source levels

Source Level (source level adjustment) lets you adjust the volume level of each source to prevent radical changes in volume when switching between sources.

❒ Settings are based on the FM tuner volume level, which remains unchanged.

1 Compare the FM tuner volume level with the level of the source you wish to adjust.

2 Touch [Source Level] in the Audio Settings menu.

3 Touch [+] or [–] to adjust the source volume.

+8 to **–8** is displayed as the source volume is increased or decreased.

Sources are set to same source level adjustment volume automatically.

- **CD** and **ROM** (**MP3**)
- **XM** and **SIRIUS**
- **EXT 1** and **EXT 2**
- **AUX** and **AV INPUT**

Customizing the System Settings Items

System Settings lets you perform system set up of different settings for navigation system.

How to view and operate the System Settings

1 Press the AV button.

The Navigation screen changes to the Audio source screen (of any source).

2 Touch [AV Settings].

The AV Settings screen appears.

3 Touch [System Settings].



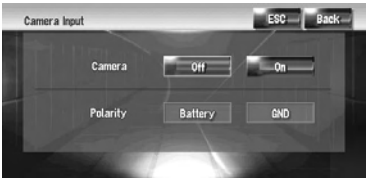
4 Touch the item you want to change.

The setting change screen appears, or the setting changes by toggling it.



❒ Touch Next → or ← Back to move to the next or previous page.

5 Change Setting.



❒ Touch [**ESC**] to return to the selected source screen.

❒ To return to the previous screen, touch [**Back**].

Setting up the built-in DVD drive

You can change the preference for playing a DVD on the built-in DVD drive.
You can use this menu to change audio, subtitle, parental lock, and other DVD settings.
Some changings or settings which you have set here, may be invalid depending on the features of the DVD disc. For details, see the disc's instructions.

- ❒ You can enter this menu while [**DVD**] is selected as audio source.
- ❒ If you can enter this menu during DVD playback, playback will be stopped and return to the first chapter.

Setting the language

You can set each desired language for subtitle, audio, and menu. If the selected language is recorded on the DVD, subtitles, audio, menu are displayed in that language.

1 Switch the audio source to [DVD].

2 Touch [DVD-V Setup] in the System Settings menu.

3 Touch [Subtitle Language], [Audio Language] or [Menu Language].
Each language menu is displayed and the currently set language is selected.

4 Touch the desired language.
When you select [**Others**], a language code input display is shown. Input the four digit code of the desired language then touch [**Enter**].

➲ "Language code chart for DVD" → Page 159

- ❒ If the selected language is not recorded on the disc, the default language specified on the disc is output and displayed.
- ❒ You can also switch the subtitle and audio language by touching [**Subtitle**] or [**Audio**] during playback.

➲ Changing the subtitle language during playback (Multi-subtitle) → Page 108
➲ Changing audio language during playback (Multi-audio) → Page 108

Setting assist subtitles on or off

Assist subtitles offer explanations for the aurally impaired. However, they are only displayed if they are recorded on the DVD.
You can turn assist subtitles on or off as desired.

1 Touch [DVD-V Setup] in the System Settings menu.

2 Touch [Assist Subtitle].
Touching [**Assist Subtitle**] switches between [**On**] and [**Off**].

Setting angle icon display

You can set to display the angle icon on scenes where the angle can be switched.

1 Touch [DVD-V Setup] in the System Settings menu.

2 Touch [Multi Angle].
Touching [Multi Angle] switches between [**On**] and [**Off**].

Setting the aspect ratio

There are two kinds of display. A wide screen display has a width-to-height ratio (TV aspect) of 16:9, while a regular display has a TV aspect of 4:3. If you use regular rear display has a TV aspect of 4:3, you can set the aspect radio suitable for your rear display. (We recommend use this function only when you want to fit it to rear display.)

- ❒ When using a regular display, select either **Letter Box** or **Panscan**. Selecting **16:9** may result in an unnatural picture.

1 Touch [DVD-V Setup] in the System Settings menu.

2 Touch [TV Aspect].
Each touch of [**TV Aspect**] changes the settings as follows:

- **16:9** — Wide screen picture (16:9) is displayed as it is (initial setting)
- **Letter Box** — The picture is in the shape of a letter box with black bands at the top and bottom of the screen
- **Panscan** — The picture is cut short at the right and left of the screen

❒ When playing discs don't have panscan system, playback is with [**Letter Box**] even if you select the [**Panscan**] setting. Confirm whether the disc package bears like the 16:9 LB mark.

Setting the parental lock

Some DVD-Video discs let you use parental lock to give an restriction so that children can not watch a violent and adult oriented scenes. You can set the parental lock level in steps as desired.

❒ When you set a parental lock level and then play a disc featuring parental lock, code number input indications may be displayed. In this case, playback will begin when the correct code number is input.

Setting the code number and level

When you first use this function, register your code number. If you do not register a code number, parental lock will not operate.

1 Touch [DVD-V Setup] in the System Settings menu.

2 Touch [Parental Level].

3 Touch 0 — 9 to input a four digit code number.

4 While the input number is displayed, touch [Enter].

The code number is registered, and you can now set the level.

5 Touch any of 1 — 8 to select the desired level.

The parental lock level is set.

- **Level 8** — Playback of the entire disc is possible (initial setting)
- **Level 7** — **Level 2** — Playback of discs for children and non-adult oriented discs is possible
- **Level 1** — Playback of discs for children only is possible

❒ If you want to change the parental level, enter the registered code number in the Step 3.

❒ We recommend to keep a record of your code number in case you forget it.

❒ The parental lock level is recorded on the disc. You can confirm it by looking at the disc package, included literature or on the disc itself. With discs that do not feature a recorded parental lock level, you cannot use parental lock.

❒ With some discs, parental lock operates to skip certain scenes only, after which normal playback resumes. For details, refer to the disc's instructions.

❒ If you forget the registered code number, touch [**Clear**] 10 times on the screen in the Step 3. The registered code number is canceled, letting you register a new one.

Changing the wide screen mode

⚠ CAUTION

- **For safety reasons, these functions are not available while your vehicle is in motion. To enable these functions, you must stop in a safe place and put on the parking brake before setting your route (see page 18 Interlock for details).**

1 Touch [Wide Mode] in the System Settings menu.

The Wide Mode screen appears.
On the Wide Mode screen, you can select the following items:
Full, **Just**, **Cinema**, **Zoom** or **Normal**

Normal (normal):
A 4:3 picture is displayed as it is, giving you no sense of disparity since its proportions are the same as that of the normal picture.

Full (full):
A 4:3 picture is enlarged in the horizontal direction only, enabling you to enjoy a 4:3 TV picture (normal picture) without any omissions.

Just (just):
The picture is enlarged slightly at the center and the amount of enlargement increases horizontally toward the ends of the picture, enabling you to enjoy a 4:3 picture without sensing any disparity even on a wide screen.

Cinema (cinema):

A picture is enlarged by the same proportion as **Full** or **Zoom** in the horizontal direction and by an intermediate proportion between **Full** and **Zoom** in the vertical direction; ideal for a cinema-sized picture (wide screen picture) where captions lie outside the frame.

Zoom (zoom):
A 4:3 picture is enlarged in the same proportion both vertically and horizontally; ideal for a cinema-sized picture (wide screen picture).

- ❒ Different settings can be memorized for each video source.
- ❒ When video is viewed in a wide screen mode that does not match its original aspect ratio, it may appear differently.
- ❒ Remember that use of this system for commercial or public viewing purposes may constitute an infringement on the author's rights protected by the Copyright Law.
- ❒ Video will appear grainy when viewed in **Cinema** or **Zoom** mode.
- ❒ The navigation map and the rear view camera picture is always **Full**.

Setting for rear view camera

The following two functions are available. The rear view camera feature requires a separately sold rear view camera (e.g. ND-BC1). (For details, consult your dealer.)

Camera for backing up

The navigation system features a function that automatically switches to the full-screen rear camera image installed on your vehicle. When the shift lever is in REVERSE (R) position, the screen automatically switches to full-screen rear view camera.

Camera for Rear view mode

[**Rear View**] can be displayed at all times (e.g. when monitoring an attached trailer, etc.) as a split screen where map information is partially displayed. Please be aware that in this setting, camera image is not resized to fit, but that a portion of what is seen by the camera is not viewable.

⚠ CAUTION

- **Pioneer recommends the use of a camera which outputs mirror reversed images, otherwise screen image may appear reversed.**

- ❒ Immediately confirm whether the display changes to a rear view camera image when the shift lever is moved to REVERSE (R) from another position.
- ❒ When the screen changes to full-screen rear view camera image during normal driving, switch to the opposite setting.
- ❒ Initially, this function is set to **On**.

1 Touch [Camera Input] in the System Settings menu.

2 Touch [On] to turn rear view camera setting on.

- ❒ Unless this setting is [**On**], you cannot switch to **Rear View** mode.

3 Touch [Polarity] to select an appropriate setting for polarity.

Each time you touch [**Polarity**] switches between the following polarity:

- **Battery** — When the polarity of the connected lead is positive while the shift lever is in the REVERSE (R) position
- **GND** — When the polarity of the connected lead is negative while the shift lever is in the REVERSE (R) position

Setting the video input

You can switch the setting according to the connected component.

- ❒ Select [**Video**] to watch video of a connected component as **AV** source.

1 Touch [AV Input] in the System Settings menu.

Each touch of [**AV Input**] changes the settings as follows:

- **Off** — No video component is connected
- **Video** — External video component
- **EXT** — Pioneer external unit connected with RCA video cable

❒ When a Pioneer external unit is connected with an IP-BUS cable, select [**EXT**]. When the audio source is [**EXT**], the "Video image" of the Pioneer external unit can be displayed.

Switching the auxiliary setting

It is possible to use auxiliary equipment with navigation system as the one of source. Activate the auxiliary setting when using auxiliary equipment connected to the navigation system.

1 Touch [AUX Input] in the System Settings menu.

Touching [**AUX Input**] switches between [**On**] and [**Off**].

➲ Selecting AUX as the source ➞ Page 145

Switching the muting/attenuation timing

You can select the audio source volume is muted or attenuated what signal is output. This setting is invalid for the mute signal has been received from the CELLULAR MUTE lead connected to the navigation unit. (Even if this setting is [**Off**], the navigation system will mute or attenuate the audio source volume, when the signal via CELLULAR MUTE lead is output.)

1 Touch [Mute Set] in the System Settings menu.

Each touch of [**Mute Set**] changes the settings as follows:

- **Guide/Tel/VR** — The volume is muted or attenuated by the following condition

— When the navigation outputs the guidance voice.

— When you use a cellular phone via Bluetooth technology (dialing, talking, incoming call).

— When the voice recognition mode is activated.

- **Tel/VR** — The volume is muted or attenuated by the following condition

— When you use a cellular phone via Bluetooth technology (dialing, talking, incoming call).

— When the voice recognition mode is activated.

- **Off** — The Volume does not change

❒ Operation returns to normal when the correspond action is ended.

❒ Even when navigation voice guidance itself cannot be attenuated or muted. If you want to mute the navigation guidance voice temporarily, use on the navigation map screen.

Switching the muting/attenuation level

You can select the muting/attenuation level of [**Mute Set**]. This setting is also effected for the mute signal has been received from the CELLULAR MUTE lead connected to the navigation unit.

❒ This menu is not available in the following cases :

— Audio source is [**OFF**]

— During muting/attenuation

— [**5.1Ch Setup**] is [**On**]

1 Touch [Mute Level] in the System Settings menu.

Each touch of [**Mute Level**] changes the settings as follows:

- **All** — The volume becomes 0
- **–20dB** — The volume becomes 1/10
- **–10dB** — The volume becomes 1/3

❒ When you select [**All**], [**Mute**] is displayed and no audio adjustments are possible during the sound is turned off.

❒ When you select [**–20dB**] or [**–10dB**], no audio adjustments, except volume control, are possible during the sound is attenuated.

❒ Operation returns to normal when the correspond action is ended.

❒ Even when a mute signal has been received from the CELLULAR MUTE lead connected to the navigation unit, navigation voice guidance cannot be attenuated or muted. If you want to mute the navigation guidance voice temporarily, use on the navigation map screen.

Changing the voice output of the navigation guidance

You can set the speaker to output the navigation guidance and phone voice, etc.

1 **Touch [Guide/Tel SP] in the System Settings menu.**
Each touch of [**Guide/Tel SP**] changes the settings as follows:
- **Left SP** — Uses only the front left speaker
- **Right SP** — Uses only the front right speaker
- **L+R SP** — Uses both the front right and left speakers

Switching the auto antenna setting

If the blue lead of the navigation system is connected to the auto antenna of the vehicle, select either of the following settings.
- **Radio** — Extends the antenna only for the **FM** or **AM** source. The antenna is stored when the source is switched to another.
- **Power** — Extends the antenna when the ignition switch is turned on. The antenna is stored when the ignition switch is turned off.

1 **Touch [Auto ANT] in the System Settings.**
Touching [**Auto ANT**] switches between [**Radio**] and [**Power**].
❒ Regardless of whether [**Radio**] or [**Power**] is selected, turning off the ignition switch will cause the antenna to automatically retract.

Setting the clock display on the video image

You can select whether to display the clock on the video image screen without touch keys, such as DVD-Video, AV INPUT, or TV tuner.

1 **Touch [Clock DISP] in the System Settings menu.**
Touching [**Clock DISP**] switches between [**All SCRN**] and [**Audio SCRN**].
- **All SCRN** — The clock is overlaid on the "Video image"
- **Audio SCRN** — The clock is not overlaid on the "Video image"

Setting the CD recording mode

You can set whether to start recording tracks automatically when you plays a CD, or to manually trigger recording.

1 **Touch [REC Mode] in the System Settings menu.**
Each touch of [**REC Mode**] changes the settings as follows:
- **Auto** — Records the tracks automatically when a CD is played
- **Manual** — Lets you select the tracks you want to record manually, and records them
- **Single** — Automatically records only the first track of the CD

Setting the rear output and subwoofer controller

The navigation system's rear output can be used for full-range speaker or subwoofer connection. If you switch **Rear SP** setting to the **Sub.W**, you can connect a rear speaker lead directly to a subwoofer without using an auxiliary amp.
Initially, navigation system is set for rear fullrange speaker connection. When rear output is connected to fullrange speakers (when **Rear SP** setting is **Full**), you can connect the RCA subwoofer output (description on the label) to a subwoofer. In this case, you can select whether to use the subwoofer controller's (low pass filter, phase) built-in amp of the navigation system or the auxiliary amp or subwoofer.

❒ If you change the subwoofer controller [**Rear SP**] or [**Preout**], [**Sub Woofer**] or [**Non Fading**] in the **Audio Settings** menu return to the factory settings.

❒ Both rear speaker leads output and RCA rear output are switched simultaneously in this setting.

❒ **Rear SP** can be set only when the source is **OFF**.

1 Touch [Rear SP] in the System Settings menu.

2 Touch [Full] or [Sub.W] to switch the rear output setting.

❒ When no subwoofer is connected to the rear output, select **Full**. When a subwoofer is connected to the rear speaker leads directly, select **Sub.W**.

3 Touch [Preout] to switch the subwoofer output or non fading output.

❒ When the [**Rear SP**] setting is **Sub.W**, [**Preout**] is invalid.

❒ Even if you change this setting, there is no output unless you turn [**Non Fading**] or [**Sub Woofer**] in the **Audio Settings** menu [**On**].

➲ "Using non fading output" ➞ Page 150

➲ "Using subwoofer output" ➞ Page 150

Switching the 5.1ch setting

When the navigation system is combined with the multi-channel processor system (sold separately), you can use the multi-channel sound. Enter the following setting when combining the multi-channel processor system.

⚠ CAUTION

- **DO NOT enter this setting before you connect the multi-channel processor system. (If this setting is entered, the Front RCA will output maximum volume for the multi-channel processor system.) Pioneer is not responsible for any damage to the speaker equipment caused by ignoring this warning.**

❒ This setting is possible only when the optical cable connection box (supplied with the Multi-channel processor) is connected to the navigation system.

1 Touch the source icon and then touch [OFF] to turn source off.

When the source icon is not displayed, you can display it by touching the screen.

2 Touch [5.1Ch Setup] in the System Settings menu.

If you touch [**5.1Ch Setup**], it will be turned [**On**]. If you touch [**5.1Ch Setup**] again to turn [**Off**] the setting, [**5.1Ch Setup**] will disappear. If you want to turn it [**On**] again, you have to repeat the procedure from the Step1.

Other Functions

Selecting the video for "Rear display"

You can choose either to show the same image as the front screen or to show the selected source on the "Rear display".

1 Touch the source icon and then touch [REAR SCREEN].

Each touch of [**REAR SCREEN**] changes the settings as follows:

- **MIRROR** — The video on the front screen of the navigation unit is output to the "Rear display"
- **DVD** — The video and sound of the DVDs are output to the "Rear display"
- **AV** — The video and sound of the **AV INPUT** are output to the "Rear display"

❒ When **MIRROR** is selected, the following restrictions are applied to "Rear display".

— The TV tuner connected with AV-BUS, its "Video image" cannot be output. (Connect with TV tuner's rear output to "Rear display" directly.)

— When selecting Rear View in the map display, nothing is displayed.

— All sounds cannot be output for "Rear display".

— There is no picture on "Rear display" while [**Picture Adjust**] for [**Back-Camera**] is carried out.

— The map screen navigation images output to the "Rear display" differ from standard NTSC format images. Therefore, their quality will be inferior to the images that appear on the front screen.

❒ When **DVD** is selected, the following restrictions are applied to "Rear display".

— When the CD or MP3 disc is set in the built-in DVD drive, nothing is output.

❒ When **AV** is selected, the following restrictions are applied to “Rear display”.
— The “Video image” and sound are output only when the **AV INPUT** has them.
— The “Video image” and sound are output only when the appropriate setting on [**AV Input**] is [**Video**].

Operating the picture adjustment

⚠ CAUTION

- **For safety reasons, these functions are not available while your vehicle is in motion. To enable these functions, you must stop in a safe place and put on the parking brake before setting your route (see page 18 Interlock for details).**

You can adjust for each source and rear view camera.

1 Press the V button to display Picture Adjust screen.



- **Brightness** — Adjusts the black intensity
- **Contrast** — Adjusts the contrast
- **Color** — Adjusts the color saturation
- **Hue** — Adjusts the tone of color (red is emphasized or green is emphasized)
- **Dimmer** — Adjusts the brightness of display
- **Back-Camera** — Shows the picture adjustment display for the rear view camera

❒ Touching [**Source**] while adjusting the rear view camera image returns you to the previous screen.

❒ The adjustments of **Brightness**, **Contrast** and **Dimmer** are stored separately when your vehicle is headlight is on (daytime) and when your vehicle’s headlight is off (nighttime). These are switched automatically depending on the condition of the vehicle’s headlight.

❒ You cannot adjust **Color** and **Hue** for the source without a video and navigation map display.

❒ The setting contents can be memorized separately for the following screen and the “Video image”.
— **AM**/**FM**/**M-CD**/**iPod**/**AUX**/**XM**/**SIRIUS** screen
— **LIBRARY** (Music Library) screen
— Built-in DVD drive
— **TV** image
— **AV Input**/**EXT**
— Rear view camera image
— Navigation map and menu screen

❒ The picture adjustment may not be able to be used with some rear view cameras.

❒ Because of the LCD screen characteristics, you may not be able to adjust the screen at low temperatures.

2 Touch [+] or [–] to adjust the desired item.
Each time you touch [**+**] or [**–**] increases or decreases the level of desired item.

3 Touch [ESC] to return to the previous screen.

Switching the Backlight On/Off

By turning off the backlight of the LCD screen, you can turn off the screen display without turning off the voice guidance.

1 Press and hold the V button.
The backlight turns off, and the screen turns off.

❒ Press the **V** button once again to turn on the backlight, and the screen is displayed.

Language Code Chart for DVD

Language (code), input code	Language (code), input code	Language (code), input code
Japanese (ja), 1001	Guarani (gn), 0714	Pashto, Pushto (ps), 1619
English (en), 0514	Gujarati (gu), 0721	Quechua (qu), 1721
French (fr), 0618	Hausa (ha), 0801	Rhaeto-Romance (rm), 1813
Spanish (es), 0519	Hindi (hi), 0809	Kirundi (rn), 1814
German (de), 0405	Croatian (hr), 0818	Rumanian (ro), 1815
Italian (it), 0920	Hungarian (hu), 0821	Kinyarwanda (rw), 1823
Chinese (zh), 2608	Armenian (hy), 0825	Sanskrit (sa), 1901
Dutch (nl), 1412	Interlingua (ia), 0901	Sindhi (sd), 1904
Portuguese (pt), 1620	Interlingue (ie), 0905	Sango (sg), 1907
Swedish (sv), 1922	Inupiak (ik), 0911	Serbo-Croatian (sh), 1908
Russian (ru), 1821	Indonesian (in), 0914	Shinghalese (si), 1909
Korean (ko), 1115	Icelandic (is), 0919	Slovak (sk), 1911
Greek (el), 0512	Hebrew (iw), 0923	Slovenian (sl), 1912
Afar (aa), 0101	Yiddish (ji), 1009	Samoan (sm), 1913
Abkhazian (ab), 0102	Javanese (jw), 1023	Shona (sn), 1914
Afrikaans (af), 0106	Georgian (ka), 1101	Somali (so), 1915
Amharic (am), 0113	Kazakh (kk), 1111	Albanian (sq), 1917
Arabic (ar), 0118	Greenlandic (kl), 1112	Serbian (sr), 1918
Assamese (as), 0119	Cambodian (km), 1113	Siswati (ss), 1919
Aymara (ay), 0125	Kannada (kn), 1114	Sesotho (st), 1920
Azerbaijani (az), 0126	Kashmiri (ks), 1119	Sundanese (su), 1921
Bashkir (ba), 0201	Kurdish (ku), 1121	Swahili (sw), 1923
Belorussian (be), 0205	Kirghiz (ky), 1125	Tamil (ta), 2001
Bulgarian (bg), 0207	Latin (la), 1201	Telugu (te), 2005
Bihari (bh), 0208	Lingala (ln), 1214	Tajik (tg), 2007
Bislama (bi), 0209	Laotian (lo), 1215	Thai (th), 2008
Bengali, Bangla (bn), 0214	Lithusnian (lt), 1220	Tigrinya (ti), 2009
Tibetan (bo), 0215	Latvian, Lettish (lv), 1222	Turkmen (tk), 2011
Breton (br), 0218	Malagasy (mg), 1307	Tagalog (tl), 2012
Catalan (ca), 0301	Maori (mi), 1309	Setswana (tn), 2014
Corsican (co), 0315	Macedonian (mk), 1311	Tongan (to), 2015
Czach (cs), 0319	Malayalam (ml), 1312	Turkish (tr), 2018
Welsh (cy), 0325	Mongolian (mn), 1314	Tsonga (ts), 2019
Danish (da), 0401	Moldavian (mo), 1315	Tatar (tt), 2020
Bhutani (dz), 0426	Marathi (mr), 1318	Twi (tw), 2023
Esperanto (eo), 0515	Malay (ms), 1319	Ukrainian (uk), 2111
Estonian (et), 0520	Maltese (mt), 1320	Urdu (ur), 2118
Basque (eu), 0521	Burmese (my), 1325	Uzbek (uz), 2126
Persian (fa), 0601	Nauru (na), 1401	Vietnamese (vi), 2209
Finnish (fi), 0609	Nepali (ne), 1405	Volapu˜k (vo), 2215
Fiji (fj), 0610	Norwegian (no), 1415	Wolof (wo), 2315
Faroese (fo), 0615	Occitan (oc), 1503	Xhosa (xh), 2408
Frisian (fy), 0625	(Afan) Oromo (om), 1513	Yoruba (yo), 2515
Irish (ga), 0701	Oriya (or), 1518	Zulu (zu), 2621
Scottish Gaelic (gd), 0704	Panjabi (pa), 1601	
Galician (gl), 0712	Polish (pl), 1612	

Operating Your Navigation System with Voice

To Ensure Safe Driving

⚠ CAUTION

- **For safety reasons, Voice Help menu (Voice Recog.Help) is not available while your vehicle is in motion. To enable this function, you must stop in a safe place and put on the parking brake before setting your route.**

Basics of Voice Operation

Your Pioneer navigation system uses with the latest in voice recognition technology. You can use voice commands to operate many of its functions. This chapter describes where you can use voice commands, and also what commands the system accepts.

Flow of voice operation

You can start voice operation any time even when the map screen is displayed or audio is operated. (Some operations are not available.) The basic steps of voice operation are as follows.

1 Touch VOICE icon to activate voice operation.

↓

2 Speak a command into the microphone after the beep.

↓

3 When the command is recognized, the navigation system displays the response message on the screen, and pronounces it in some cases.

↓

4 As necessary, repeat Steps 3.

↓

5 The requested operation will be carried out.

❒ The voice operation may not enable for a minute after the navigation system has booted up.

❒ If you operate using the “CD-SR1” Steering Remote Control (sold separately), the following buttons can be used for operation:

VR ACTIVATION / OFF HOOK button:
Same function as **VOICE** icon.

VR CANCEL / ON HOOK button:
Return to previous screen.

To start voice operation

No sounds can be out put during .

1 Touch VOICE icon.

Navigation screen



Audio screen

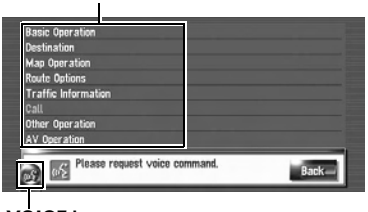


❒ Depending on the operating state of the navigation system, some commands displayed in Voice Help may be unavailable. Available commands are in white and unavailable commands are in grey.

When using voice operation for the first time

Until you are familiar with this system, it is recommended to stop the vehicle in a safe place and refer to the commands displayed in the Voice Help menu (a list of the words you can speak). When your vehicle is parked with the parking brake on, see the Voice Help menu and speak voice command on that menu (except for some case).

Voice Help menu



VOICE icon

When voice command is possible

When voice command is not accepted

❒ When you say [**Voice Help**], the navigation system pronounces the displayed words that can be vocalized.

❒ If no voice icon is displayed, check to see whether the microphone is properly connected and turn the power on again.

❒ If there are too many items to list, voice help menu can be switched by using or on the screen.

To cancel voice operation

You can cancel voice operation features at any time by saying [**Cancel**]. After you cancel voice operation, the map is displayed.

❒ If no command is made in the next 6 seconds, voice recognition is canceled and the navigation system is on hold until the next operation. Touch **VOICE** icon to reactivate voice operation.

Tips for Voice Operation

For your voice commands to be correctly recognized and interpreted, ensure that conditions are suitable for recognition.

Reduce the volume setting on your vehicle audio system

➲ The sound volume is automatically reduced during voice operation → Page 91

Close the vehicle windows

Please note that wind through the vehicle window or miscellaneous noise from outside the vehicle can interfere with voice operation.

Position the microphone carefully

For optimum pick-up, the microphone should be fixed at a suitable distance directly in front of the driver.

Pause before giving a command

Speaking too soon may cause the recognition to fail.

Pronounce your commands carefully

Speak slowly, deliberately and clearly.

❒ If the registered voice command and the default voice command is the same, the registered voice command will take priority. In this case, the default voice command will not function. To use the default voice command, change or delete the registered voice command that is identical to the default voice command.

An Example of Voice Operation

Search for POI in vicinity

In this example, you want to search for the nearest gas station and set as your destination.

❒ Give the following verbal commands after switching to the navigation screen.

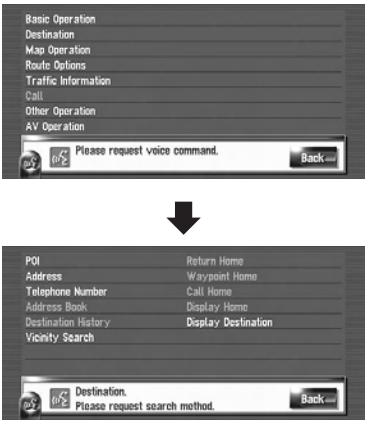
➲ "Voice commands related to navigation" → Page 165

1 Press the MAP button to display the navigation map screen.

2 Touch VOICE icon.

A list of commands for voice operation appears. After the message, the beep indicates that the system is ready to accept your voice command. Say a command after this beep.

3 Say "Destination".



A message to prompt the next operation is given.

4 Say "Vicinity Search".

Say correspond commands for the function you want to operate. Here, the selection method of your destination is specified. When you want to search the gas station nearest to the current location, say "**Vicinity Search**". The message "**Vicinity search. Please request POI category.**" appears, and the navigation system pronounces that message.

5 Say "GAS Station".

The message "**Vicinity search. (gas station)**" appears.

The map of the nearest gas station is shown.



❒ For categories which can be used as the voice commands, refer to "Category list for vicinity search".

➲ Refer to "Category list for vicinity search" → Page 172

6 Touch VOICE icon.

7 Say "Next" or "Previous" to select the desired facilities.



8 After confirming the location, say "Set As Destination".

9 Touch VOICE icon.

The message "**Starting route calculation.**" appears, and the navigation system pronounces that message.

With the location shown on the map set as the destination (or waypoint), the route calculation starts.

❒ If you say "**Back**", return the previous screen.

Search for the playlist

In this example, you want to search for the playlist and play that.

1 Touch VOICE icon when the audio source is "LIBRARY".

2 Say "Music Search".

3 Say desired group.



❒ If desired group is already selected, you can skip this step.

4 Say the playlist name you want to play.



❒ You can switch the page by using  or  on the screen.

❒ You can also search the track in the current playlist with saying "Track Search".

Using Voice Operation

This section describes the flow and available commands of each voice operation.

- ❒ During the voice operation, location screen (A) or (B) may appear. In such a case, go to “Location Screen (A) and (B)” in the later section, and continue the voice operation.
- ➲ Location Screen (A) and (B) ➞ Page 168
- ❒ For <City Name>,<Street Name>,<house number> or <POI Name> shown on the following chart, say their real name or number which you want to search for. For example, if the real POI name is “Pioneer” and you want to operate “Go to <POI Name>”, say “Go to Pioneer”.
- ❒ For <Registered location’s pronounce > shown on the following chart, say the registered pronounce. For example, if the registered pronounce in address book is “My office” and you want to operate “Go to <Registered location’s pronounce >”, say “Go to My office”. In addition, this command can be used only with the selected language when you register.
- ❒ For <Album playlist name>, <Artist playlist name >, <Genre playlist name> , <Track name> shown on the following chart, say their name in the music library (if you edited their pronounce, say their pronounce.) . In addition, this command can be used only with the selected language when you register.
- ❒ For <Category Name>, <Sub Category Name> in “Vicinity Search”, refer to “The list of categories which you can say in “Vicinity Search” and say the desired category in that list.
- ❒ You can skip the commands with the mark (*). For example, in case search by Point of interest, the system can recognize the command even if you say “POI” without saying “Destination”.
- ❒ If some candidates have been found, the candidate list appears. Select the one from the list and proceed to next step.
- ❒ The voice operation related the telephone is available only when the condition under the hands-free phoning feature of this system can be operated and unavailable during a call.
- ➲ “Using Hands-free Phoning” ➞ Page 81

Voice commands related to navigation

- ❒ Give the following verbal commands after switching to the navigation screen.

Search by address

Destination* ➞ Address ➞ <City Name> ➞ <Street Name> ➞ <House number> ➞ Location Screen (A)

Notes:

- Select the state, province or territory manually before the voice operation.
- When you say the street name, say the street type together <e.g. XXXX street, xxxx avenue, xxxx road, xxxxx boulevard, etc. >
- Some operation may be skipped depending on the address.
- If you don’t know the street name or house number, you can say “Area” so that your destination can be set to the main point of that city or street.

Search by Points of interest

Destination* ➞ POI ➞ <POI Name> ➞ Location Screen (A)

Destination* ➞ POI ➞ Go To <POI Name> ➞ If the route already set, touch **VOICE** icon to start route calculation. If there is no route, the system starts the route calculation.

Destination* ➞ POI ➞ Waypoint <POI name> ➞ Touch **VOICE** icon to start route calculation.

Destination* ➞ POI ➞ Call <POI name> ➞ Touch **VOICE** icon to call that facility. Only when the cellular phone featuring Bluetooth technology is available.

Destination* ➞ POI ➞ Display <POI name> ➞ Display the map of that facility’s surroundings.

Search by telephone number

Destination* ➞ Telephone Number ➞ Location Screen (A) (If multiple facilities exist with the same phone number, the facilities you intend may not be displayed.)

Note:

You can say 10 digits telephone number only. 911 and the number other than 10 digits is not available.

Search by entry on the address book

Destination* ➞ Address Book ➞ <Registered location name> ➞ Location Screen (A)

<Registered location name> ➞ Location Screen (A)

Destination* ➞ Go To <Registered location name> ➞ If the route already set, touch **VOICE** icon to start route calculation. If there is no route, the system starts the route calculation.

Destination* ➞ Waypoint <Registered location name> ➞ Touch **VOICE** icon to start route calculation.

Making phone call to entry on the address book

Destination* ➞ Call <Registered location name> ➞ Touch **VOICE** icon to call that facility (Only when the phone number is registered in the entry.)

Displaying the map of the entry on the address book

Destination* ➞ Display <Registered location name> ➞ Display the map of surroundings on that facility.

Search the facilities in vicinity

Destination* ➞ Vicinity Search ➞ [Category Name]/[Sub Category Name] ➞ Location Screen (B)

Displaying the destination history

Destination* ➞ Destination History ➞ Display the Destination History screen.

Setting the route to your home

Destination* ➞ Return Home ➞ If the route already set, touch **VOICE** icon to start route calculation. (If there is no route, the system starts the route calculation.)

Making phone call to your home

Destination* ➞ Call Home ➞ Touch **VOICE** icon to call your home (Only when the phone number is registered in your home.)

Setting your home to waypoint

Destination* ➞ Waypoint Home ➞ Touch **VOICE** icon to start route calculation. (This function is only available if you have set the destination.)

Display the map of surroundings on your home

Destination* ➞ Display Home ➞ Display the map of surroundings on your home.

Display the map of surroundings on your destination

Destination* ➞ Display Destination ➞ Display the map of surroundings on your destination.

Set the map location as your destination

Scroll the navigation map or switch the scroll mode from search result screen. ➞ Basic Operation* ➞ Set As Destination ➞ If the route already set, touch **VOICE** icon to start route calculation. If there is no route, the system starts the route calculation.

Set the map location as your waypoint

Scroll the navigation map or switch the scroll mode from search result screen. ➞ Basic Operation* ➞ Set As Waypoint ➞ Touch **VOICE** icon to start route calculation.

Registering the map location to the address book

Scroll the navigation map or switch the scroll mode from search result screen. ➞ Basic Operation* ➞ Registration ➞ The system register that point and Information edit screen appears.

Operating the navigation map scale

Map Operation* ➞ Change Scale* ➞ XXXX <kilo> meter(s) Scale <25m, 50m, 100m, 200m, 500m, 1km, 2km, 5km, 10km, 20km, 50km, 100km, 200km, 500km, 1000km, 2000km> ➞ Map screen will be changed to selected scale. (This function is not available in vehicle dynamics mode.)

Map Operation* ➞ Change Scale* ➞ XXXX mile/yards Scale <0.02miles, 0.05miles, 0.1miles, 0.25miles, 0.5miles, 0.75miles, 1mile, 2.5miles, 5miles, 10miles, 25miles, 50miles, 100miles, 250miles, 500miles, 1000miles, 25yards, 50yards, 100yards> ➞ Map screen will be changed to selected scale. (This function is not available in vehicle dynamics mode.)

Map Operation* ➞ Change Scale* ➞ Zoom Out/Zoom In ➞ Map screen will zoom out or zoom in.

Operating the view mode

Map Operation* ➞ Change View Mode* ➞ Map View, Driver's View, Twin Map View, Route View, Guide View, Rear View, Vehicle Dynamics ➞ Map screen will be changed to selected view mode.

Operating the map orientation

Map Operation* ➞ Heading Up, North Up ➞ Map orientation will be changed.

Recalculating the route

Route Options* ➞ Change Route* ➞ Rerouting, Use Main Road, Avoid Main Road, Use Freeway, Avoid Freeway, Use Ferry, Avoid Ferry, Use Toll Road, Avoid Toll Road ➞ If the route already set, touch **VOICE** icon to recalculate.

Checking the current route
Route Options* ➞ Route Profile ➞ Displaying the route profile screen.
Route Options* ➞ Next Guidance ➞ You can hear the information of next guidance point.
Canceling the route
Route Options* ➞ Cancel Route ➞ If the route already set, touch **VOICE** icon to cancel the current route.
Route Options* ➞ Cancel Waypoint ➞ If the route already set, touch **VOICE** icon to cancel route until next waypoint.
Checking the traffic list
Traffic Information* ➞ Traffic Event List ➞ Displaying the traffic event list.
Traffic Information* ➞ Traffic On Route List ➞ Displaying the traffic event list on your route.
Traffic Information* ➞ Traffic Flow List ➞ Displaying the traffic flow list.
Operating the cellular phone featuring Bluetooth technology
Call* ➞ Telephone book ➞ Displaying the telephone book. (Unavailable while the vehicle is running.)
Call* ➞ Call Registered Point ➞ (registered location name) ➞ If the registered location has telephone number data, touch **VOICE** icon to call the registered location.
Call* ➞ Redial ➞ Touch **VOICE** icon to redial.
Call* ➞ Call Phone Number ➞ Say the number you want to call. ➞ Touch **VOICE** icon to dial.
Call* ➞ Received Call ➞ Displaying the received call list.
Call* ➞ Call Favorite 1, 2, 3, 4, 5 ➞ Touch **VOICE** icon to dial.
Erase the tracking
Other Operation* ➞ Erase Tracks ➞ Touch **VOICE** icon to delete the tracking.
Viewing the Emargency Info screen
Other Operation* ➞ Emergency Information ➞ Displaying the Emergency info screen.
Turning on or off the Overlay POI
Other Operation* ➞ Display Overlay POI ➞ Displaying the selected POI in Overlay POI.
Other Operation* ➞ Hide Overlay POI ➞ Turn off Overlay POI.

Voice commands related to AV operation

❒ Give the following verbal commands after switching the correspond audio source (except for “Common AV commands”).

Common AV commands
AV Operation* ➞ Change Display ➞ Navigation Screen ➞ Switching to the navigation map or menu screen.
AV Operation* ➞ Change Display ➞ AV screen ➞ Switching to the Audio source screen.
AV Operation* ➞ Source Off ➞ Turning the Audio source off.
AV Operation* ➞ Traffic Channel ➞ Recalling the memorized traffic channel for XM or SIRIUS satellite radio tuner.
AV Operation* ➞ Change Source ➞ CD, DVD, AM, FM, TV, MCD, AV Input, AUX, SIRIUS, iPod, XM, EXTERNAL 1, EXTERNAL 2, Music Library ➞ Switching to the desired audio source. (You cannot switch to an unavailable source.)
Operation for Multi-CD
AV Operation* ➞ Disc 1 to 12 ➞ Selecting the disc for playback.
Operation for FM
AV Operation* ➞ Preset 1 to 6 ➞ Switching to that preset station directly.
AV Operation* ➞ Change Band ➞ Switching the band.
Operation for AM
AV Operation* ➞ Preset 1 to 6 ➞ Switching to that preset station directly.
Operation for TV
AV Operation* ➞ Preset 1 to 12 ➞ Switching to that preset station directly.
AV Operation* ➞ Change Band ➞ Switching the band.

Operation for XM, SIRIUS tuner
AV Operation* ➞ Preset 1 to 6 ➞ Switching to that preset station directly.
AV Operation* ➞ Change Band ➞ Switching the band.
AV Operation* ➞ Category Mode ➞ Switching to the Category mode.
AV Operation* ➞ All Channel Mode ➞ Switching to the All Channel mode.
AV Operation* ➞ Memo ➞ Memorizing the title and artist information of that song to MyMix.
Operation for CD
AV Operation* ➞ Change Media ➞ Switching the CD-DA part and CD-ROM (MP3) part.
Operation for Music Library
AV Operation* ➞ Music Search* ➞ Album ➞ <Album Playlist name> ➞ Playback the selected album playlist.
AV Operation* ➞ Music Search* ➞ <Album Playlist name> ➞ Playback the selected album playlist. (Note 1)
AV Operation* ➞ Music Search* ➞ Artist ➞ <Artist Playlist name> ➞ Playback the selected artist playlist.
AV Operation* ➞ Music Search* ➞ <Artist Playlist name> ➞ Playback the selected artist playlist. (Note 1)
AV Operation* ➞ Music Search* ➞ Genre ➞ <Genre playlist name> ➞ Playback the selected genre playlist.
AV Operation* ➞ Music Search* ➞ <Genre playlist name> ➞ Playback the selected genre playlist. (Note 1)
AV Operation* ➞ Music Search* ➞ My Favorites ➞ My Favorites 1, My Favorites 2, My Favorites 3, My Favorites 4, MyMix ➞ Playback selected playlist.
AV Operation* ➞ Music Search* ➞ My Favorites 1, My Favorites 2, My Favorites 3, My Favorites 4, MyMix ➞ Playback selected playlist.
AV Operation* ➞ Track Search ➞ <Track name> ➞ Playback the selected track. (Note 2)

(Note 1):This operation is available only when that group is already selected.
(Note 2):This operation is available for the playlist currently playing.

After checking traffic information manually

If the traffic congestion is found after checking the traffic information manually, “Do you want to reroute?” appears on screen. In this time, you can say voice commands to operate.

Do you want to reroute?
Options:

Yes:
The route will be recalculated by touching **VOICE** icon.

No:
The route will not be recalculated and the map screen of that location appears.

Location screen (A) and (B)

Location screen (A)



The following commands can be vocalized:

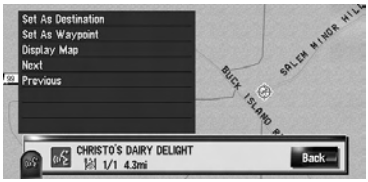
Set As Destination
If the route already set, touch **VOICE** icon to start route calculation. If there is no route, the system starts the route calculation.

Set as Waypoint
Touch **VOICE** icon to start route calculation.

Display Map
Displaying the map of surroundings on that location.

Call here
If the location has telephone number data, touch **VOICE** icon to make a call to the location.

Location screen (B)



The following commands can be vocalized:

Set As Destination
Same as above.

Set As Waypoint
Same as above.

Display Map
Same as above.

Next
Seeing the next POI.

Previous
Seeing the previous POI.

Other Voice Commands

The navigation system also can recognize the words in the following list.

Other voice commands for navigation operation

Preferential voice command	Other voice command
Back	Return, Previous
Cancel	Escape, Skip
Current Location	My Location
Voice Help	Recognition Help, Help
Next Page	Next, Following
Previous Page	Back Page
Basic Operation	Basics, Basic
Set As Destination	Set, Go
Set As Waypoint	Set Waypoint, Waypoint
Registration	Register, Store
Destination	Go To, Search
POI	Point Of Interest, Points Of Interest
Address	Addresses, Address Search
Area	Surrounding, Around
Telephone Number	Telephone, Phone Number
Address Book	Registered Points, My Addresses
Destination History	Search History, Destination List
Vicinity Search	Vicinity, Search Around
Return Home	Go Home, Drive Home
Waypoint Home	Waypoint To Home, Registered Home As Waypoint
Call Home	Phone Home, Dial Home
Display Home	Show Home
Display Destination	Destination Map, Show Destination
Map Operation	Map, Map Option
Zoom Out	Out, Higher
Zoom In	In, Lower
Change Scale	Scale, Zoom
25 meters Scale	25meters
50 meters Scale	50meters
100 meters Scale	100meters
200 meters Scale	200meters
500 meters Scale	500meters
1 kilometer Scale	1kilometer
2 kilometers Scale	2kilometers
5 kilometers Scale	5kilometers
10 kilometers Scale	10kilometers
20 kilometers Scale	20kilometers
50 kilometers Scale	50kilometers
100 kilometers Scale	100kilometers
200 kilometers Scale	200kilometers
500 kilometers Scale	500kilometers
1000 kilometers Scale	1000kilometers
2000 kilometers Scale	2000kilometers
0.02 miles Scale	0.02miles
0.05 miles Scale	0.05miles

Preferential voice command	Other voice command
0.1 miles Scale	0.1miles
0.25 miles Scale	0.25miles
0.5 miles Scale	0.5miles
0.75 miles Scale	0.75miles
1 mile Scale	1mile
2.5 miles Scale	2.5miles
5 miles Scale	5miles
10 miles Scale	10miles
25 miles Scale	25miles
50 miles Scale	50miles
100 miles Scale	100miles
250 miles Scale	250miles
500 miles Scale	500miles
1000 miles Scale	1000miles
25 yards Scale	25yards
50 yards Scale	50yards
100 yards Scale	100yards
Change View Mode	View Mode, Change View
Map View	Normal Map, Flat Map
Driver's View	Driver, 3D
Twin Map View	Twin, Split
Route View	Turns, Turn View
Guide View	Guide, Arrow
Rear View	Rear, Back View
Vehicle Dynamics	Dynamics, Meters
North Up	North, Compass
Heading Up	Head Up, Car Up
Route Options	Change Route Options
Change Route	Edit Route
Rerouting	New Route, Update Route
Use Main Road	Main Roads, Take Main Roads
Use Freeway	Freeways, Highways
Use Ferry	Ferry, Ferries
Use Toll Road	Toll Road, Payroad
Avoid Freeway	Avoid Highway, Avoid Interstate
Avoid Ferry	Avoid Ferries, Skip Ferries
Avoid Toll Road	Avoid Tolls, Avoid Pay
Cancel Route	Delete Route, Cancel Guidance
Route Profile	Profile
Cancel Waypoint	Delete Waypoint, Take Away Waypoint
Next Guidance	Following Guidance, Guidance After This
Traffic Information	Traffic, View Traffic Info
Traffic Events List	Event List, Events
Traffic On Route List	On Route List, Route List
Traffic Flow List	Flow List, Flows
Call	Dial, Ring
Call Registered Point	Call Address Book, Call Registered
Call Phone Number	Call By Number, Call Number
Telephone Book	Tel Book, Phone Book
Redial	Call Again, Phone Again
Call Favorite 1	Call 1, Phone 1
Call Favorite 2	Call 2, Phone 2

Preferential voice command	Other voice command
Call Favorite 3	Call 3, Phone 3
Call Favorite 4	Call 4, Phone 4
Call Favorite 5	Call 5, Phone 5
Received Call	Received, Who Called
Other Operation	Other, Others
Erase Tracks	Delete Tracks, Remove Tracks
Display Overlay POI	Show Overlay POI, Display POIs
Set As Destination	Set, Go
Set As Waypoint	Set Waypoint, Waypoint
Yes	OK, I Agree
No	Not OK, I Disagree

Other voice commands for AV operation

Preferential voice command	Other voice command
AV Input	Video Input
MCD	CD Changer
Rock/Pop	Rock, Pop
Hip-Hop/Rap	Hip-Hop, Rap
Soul/Urban	Soul, Urban

Category list for visinity search

❒ If you say the category name (category title), the system search for vicinity POIs in that category without taking the chain into consideration.

Category name: Gas Station

76, ARCO, BP-AMOCO, CHEVRON, CITGO, CLARK, CONOCO, ESSO, EXXON-MOBIL, FINA, GETTY, GULF, PETRO-CANADA, PHILLIPS 66, SHELL, SINCLAIR, SUNOCO, TEXACO, ULTRAMAR, Gas Station-Others

Category name: Bank & ATM

B B & T, BANK OF AMERICA, BANK OF MONTREAL, BANK OF NEW YORK, BANK OF NOVA SCOTIA, BANK ONE, CHASE MANHATTAN BANK, CIBC BANK, CITIBANK, FIRST UNION NATIONAL BANK, FLEET BANK, HSBC BANK USA, KEY BANK, LA SALLE BANK, LAURENTIAN BANK OF CANADA, MELLON BANK, NATIONAL BANK OF CANADA, PNC BANK, REGIONS BANK, ROYAL BANK OF CANADA, SOUTHTRUST BANK, SUN TRUST BANK, TORONTO DOMINION BANK, UNION BANK OF CALIFORNIA, US BANK, WACHOVIA BANK, WASHINGTON MUTUAL, WELLS FARGO BANK, Bank & ATM-Others

Category name: Restaurant

American, Asian, Barbecue, Cafe & Espresso, Chinese, Continental, Creole-Cajun, French, Greek, Indian, Italian, Japanese, Mexican, Pizzeria, Seafood, Steak House, Thai, Restaurant-Others

Category name: Fast Food Chains

ARBY'S, AU BON PAIN, BAJA FRESH, BASKIN-ROBBINS, BOSTON MARKET, BRAUM'S ICE CREAM & DAIRY, BURGER KING, CARL'S JR., CARVEL ICE CREAM BAKERY, CHURCH'S CHICKEN, COLD STONE CREAMERY, DAIRY QUEEN, HAAGEN-DAZS ICE CREAM, HARDEE'S, HARVEY'S, IN-N-OUT BURGER, JACK IN THE BOX, K F C, LONG JOHN SILVER'S, MC DONALD'S, PANDA EXPRESS, QUIZNOS, RUBIO'S, SECOND CUP, SONIC, STARBUCK'S COFFEE, SUBWAY SANDWICHES & SALADS, TACO BELL, TACO JOHN'S, TCBY, TIM HORTON'S, TJ CINNAMONS, TOGO'S, WENDY'S

Category name: Restaurant Chains

A & W FAMILY RESTAURANT, APPLEBEE'S, BENNIGAN'S, BONANZA, CHILI'S GRILL & BAR, CHUCK E CHEESE PIZZA, CLAIM JUMPER, COCO'S, DOMINO'S PIZZA, FAZOLI'S, GODFATHER'S PIZZA, GOLDEN CORRAL FAMILY STEAK HSE, IHOP RESTAURANT, KELSEY'S, LITTLE CAESARS PIZZA, LONE STAR STEAKHOUSE, MARIE CALLENDER, OUTBACK STEAKHOUSE, PAPA JOHN'S PIZZA, PASTA CONNECTION, PERKINS FAMILY RESTAURANT, PIZZA HUT, PONDEROSA STEAK HOUSE, RED LOBSTER, ROUND TABLE PIZZA, RUBY TUESDAY, SHAKEY'S PIZZA, SIZZLER, SWISS CHALET, TGI FRIDAY'S

Category name: Supermarkets

ACME, ALBERTSONS, ALDI, ATLANTIC & PACIFIC TEA CO, BI-LO, CUB FOODS, FOOD LION, GIANT, GIANT EAGLE, H-E-B, HY-VEE, IGA, JEWEL, KROGER, MEIJER, PANTRY, PATHMARK, PIGGLY WIGGLY, PUBLIX, RALEY'S, RALPH'S, SAFEWAY, SAVE-A-LOT, SHAW'S SUPERMARKET, STOP & SHOP, STOP N GO, TOPS FRIENDLY MARKET, VON'S, WHOLE FOODS, WINN-DIXIE, Supermarkets-Others

Category name: Automotive

AAA, RV Facility, Automobile Club, Parking, Car Parts & Accessories, Car Repair Facility, Car Wash

Category name: Retailer Chains

BURLINGTON COAT FACTORY, COSTCO, FACTOR 2-U, KMART, KOHL'S, ROSS, SAM'S CLUB, STEIN MART, T J MAXX, TARGET STORES, WAL-MART, Retailer Chains-Others

Category name: Hotel

AMERI HOST INN, BAYMONT INN & SUITES, BEST WESTERN, COURTYARD BY MARRIOTT, DAYS INN, DOUBLE TREE, ECONO LODGE, EMBASSY SUITES, FAIRFIELD INN, HAMPTON INN, HILTON, HILTON GARDEN INN, HOLIDAY INN, HOMEWOOD SUITES, HOWARD JOHNSON, HYATT, KNIGHTS INN, LA QUINTA INN, MARRIOTT, MOTEL 6, QUALITY-COMFORT-CLARION, RAMADA INN, RED ROOF INN, RESIDENCE INNS, SCOTTISH INN, SHERATON, STUDIO 6, SUPER 8, TRAVELODGE, WINGATE INN, Hotel-Others

Category name: Car Dealer

ACURA, AUDI, BMW, BUICK, CADILLAC, CHEVROLET, CHRYSLER, DAEWOO, DODGE, FORD, HONDA, HYUNDAI, INFINITI, ISUZU, JAGUAR, JEEP, KIA, LAND ROVER, LEXUS, LINCOLN, MAZDA, MERCEDES-BENZ, MITSUBISHI, NISSAN, OLDSMOBILE, PONTIAC, PORSCHE, SAAB, SATURN, SUBARU, SUZUKI, TOYOTA, VOLKSWAGEN, VOLVO, Car Dealer-Others

Category name: Rental and Other Services

Rental Car, Video Rental, Laundromat, Dry Cleaners

Category name: Electronics Retailer

BEST BUY, CIRCUIT CITY, FRY'S ELECTRONICS, GOOD GUYS, RADIO SHACK, ULTIMATE ELECTRONICS, Electronics Retailer-Others

Category name: Groceries

Liquor Store, Bakery, Butcher, Convenience Store, Delicatessen, Groceries-Others

Category name: Shopping

Shopping Center, Beauty & Barber, Book Store, Music Store, Fashion, Florist, Furniture, Home Improvement, Glassware, House & Office, Optometrist, Shoes & Bags, Sporting Goods, Toys, Cellular Phone Shop, Shopping-Others

Category name: Entertainment

Stadium & Arena, Brewery, Casino, Cinema, Night Club, Theater & Play, Winery, Pub

Category name: Leisure

Museum, Art Gallery, Zoo, Amusement Park, Fair Ground, Beach, National Park & Forest, Camping & Hiking, Ski Resort, Bowling, Golf Course, Gym, Pool & Tennis, Travel Agency, Tourist Information, Tourist Attraction, Park & Recreation

Category name: Public Service & Facility

Police Station, Government Office, Post Office, Court House, Convention Center, City Center, Library

Category name: Transportation

Airline Access, Airport, Ferry Terminal, Train Station, Rest Area

Category name: Medical

Doctor, Dentist, Veterinarian, Emergency Medical Service, Hospital, Pharmacy

Category name: School

University & College, Nursery School, Elementary School, Junior High School, High School, Vocational School

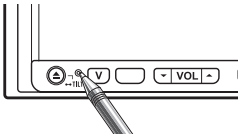
Appendix

Returning the Navigation System to the Default or Factory Settings

You can return settings or recorded contents to the default or factory settings. There are four methods to clear user data, and the situations and the cleared content are different for each method. For the content to be cleared in each methods, see the list presented later.

❒ The map data and the system data are not cleared from the hard disk drive by any clearing method.

Method 1: RESET button
Pressing the **RESET** button clears almost all settings of the audio function.



The system becomes the same state when the battery of the vehicle is removed or the yellow lead of the navigation system is disconnected.

Method 2: [Restore Factory Settings]
Clears some items in the [**Map**] menu and in the [**Settings**] menu.

➲ [**Restore Factory Settings**] → Page 176

Method 3: [Reset] on start-up
Clears the setting values stored in the hard disk drive.

➲ "If system errors frequently occur" → Page 177

Method 4: [Clear user information from hard disk] on start-up
Clears all user data (including Music Library) stored in the hard disk drive.

➲ "Returning the navigation system completely to the initial state" → Page 177

Setting items to be deleted

The items to be deleted vary depending on the reset method. The items listed in the following table return to the default or factory settings. The items not listed below will be retained.

However, if you carry out [Clear user information from hard disk] all the settings related to the navigation function including the item not listed below are deleted.

— : The setting will be retained.

✓ : The setting content will be cleared and returns to the default or factory settings.

		Method 1	Method 2	Method 3	Method 4
Navigation functions					
Map function	View mode and scale setting on the map	—	—	✓	✓
	Direction of the map	—	—	✓	✓
	Last cursor position on the map screen	—	—	✓	✓
Route Setting	Current route	—	—	✓	✓
	Guidance state of the current route	—	—	✓	✓
	Vehicle position information	—	—	✓	✓
	Route conditions	—	✓	✓	✓
Destination menu	Auto full-in function for cities and streets	—	—	✓	✓
	Point registered in **Address Book**	—	—	—	✓
	Sorting order selected in **Address Book**	—	—	✓	✓
Information menu	Sorting order selected in **Traffic Events**, **Traffic On Route**, and **Traffic Flow**	—	—	✓	✓
	Traffic Settings	—	—	✓	✓
	Phone Settings (**Phone Menu**)	—	—	✓	✓
	Telephone Book, **Dial Favorite**, **Dialed Numbers**, **Received Calls** (**Phone Menu**)	—	—	—	✓
	Stock Info	—	—	—	✓
	My Favorites	—	—	—	✓
	Emergency Info	—	—	✓	✓
Map menu	**Short-Cut Selection**, **View Mode**	—	—	✓	✓
	Displayed Info, **Overlay POI**, **Day/ Night Display**, **AV Guide Mode**, **Road Color**	—	✓	✓	✓
Settings menu	**Language** (**Regional settings**), **Time** (**Regional settings**), **Installation Angle Setup** (**Hardware**), **Defined Locations**, **Modify Current Location**, **Background Picture Setting**	—	—	✓	✓
	Items other than above	—	✓	✓	✓
	[**Learning Status**] ([**Hardware**]), [**3D Calibration Status**] ([**Hardware**])	—	—	—	—
Vehicle Dynamics	Right and left gauge type, **Adjust Look**	—	—	✓	✓
Audio Settings	All items	✓	—	—	—
System Settings	**Mute Set**	✓	—	✓	✓
	Clock DISP		—	✓	✓
	REC Mode		—	✓	✓
	Other item		—	—	—

		Method 1	Method 2	Method 3	Method 4
Audio functions					
Music Library (**LIBRARY**)	Repeat, Random, Scan, and Pause settings	✓	—	✓	✓
	Track data	—	—	—	✓
	Play list	—	—	—	✓
	Last playback position	—	—	—	✓
XM	Alert on/off for My Mix	✓	—	✓	✓
FM	Preset memory	✓	—	—	—
AM	Preset memory	✓	—	—	—
TV	Preset memory	✓	—	—	—
REAR SCREEN	Rear Screen setting	✓	—	✓	✓
Others	Picture Adjust	✓	—	—	—
	Display Angle	✓	—	—	—

If system errors frequently occur

If system errors frequently occur and the power to the navigation system turns off, an inappropriate content may have been recorded in the memory or the hard disk drive. In such a case, the normal operation may be restored by clearing the setting values stored in the hard disk drive. For the contents to be cleared, see the list presented later.

➲ Chart for data deleted ➞ Page 176

1 Start the engine.
After a little time, the start-up screen comes on for a few seconds.

2 Touch and hold the MAP button while the start-up screen is displayed.
The Clear memory screen appears.

3 Touch [Reset].

4 Touch [Yes].
The setting values stored in the hard disk drive return to the default or factory settings. After that, the navigation opening screen appears.

Returning the navigation system completely to the initial state

To return the entire navigation system to the default or factory settings, initialize the navigation system in the following order:

1. **Press the RESET button on the hardware.**
2. **Initialize the user data area on the hard disk drive.**
3. **Clear the learned data in the sensor.**

1 Turn the ignition switch off.

2 Press the RESET button.

3 Start the engine.
After a little time, the start-up screen comes on for a few seconds.

4 Touch and hold the MAP button while the start-up screen is displayed.
The Clear memory screen appears.

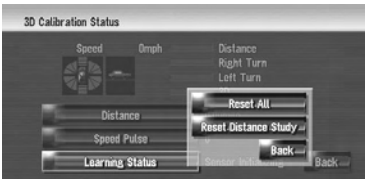
5 Touch [Clear user information from hard disk].
❒ This reset operation clears all music data recorded in the music library. Note that the cleared data cannot be restored.

6 Touch [Yes].
The user area in the hard disk drive is initialized. After that, the navigation system restarts.

7 Press the MENU button and then touch [Settings].
The setting menu appears.

8 Touch [Hardware] and then touch [3D Calibration Status].

9 Touch [Learning Status] and then touch [Reset All].

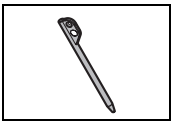


Adjusting the Response Positions of the Touch Panels (Touch Panel Calibration)

If you feel that the touch keys on the screen deviate from the actual positions that respond to your touch, adjust the response positions of the touch panel. There are two adjustment methods: 4-point adjustment, in which you touch four corners of the screen; and 16-point adjustment, in which you make fine-adjustments on the entire screen.

❒ Make sure to use the supplied stylus for adjustment, and gently touch the screen. If you press the touch panel forcefully, the touch panel may be damaged. Do not use a sharp pointed tool such as a ballpoint pen or a mechanical pen. Otherwise the screen is damaged.

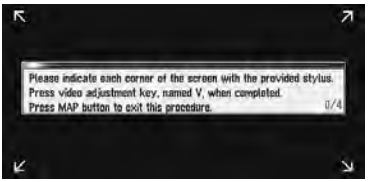
Stylus (supplied with navigation system)



1 Press the V button.
The Picture Adjust screen appears.

2 Press and hold the V button for two seconds or more.
The 4-point touch panel adjustment screen appears.

3 Touch and hold each of the arrows on the four corners of the screen with the touch panel adjustment pen.
Hold the pen on the arrow until each one of the four arrows turns red.



4 Press the V button.

The adjusted position data is saved.

- ❒ Do not turn off the engine while saving the adjusted position data.
- ❒ Press the **MAP** button to complete the 4-point adjustment.

5 Press the V button.

The 16-point touch panel adjustment screen appears.

6 Gently touch the center of the + mark displayed on the screen with the touch panel adjustment pen.

After you touch all marks, the adjusted position data is saved.

- ❒ Do not turn off the engine while saving the adjusted position data.
- ❒ Press the **V** button to return to the previous adjustment position.
- ❒ To cancel the adjustment, press the **MAP** button.

7 Press the MAP button.

The adjustment is complete.

- ❒ If touch panel adjustment cannot be performed properly, consult your local Pioneer dealer.

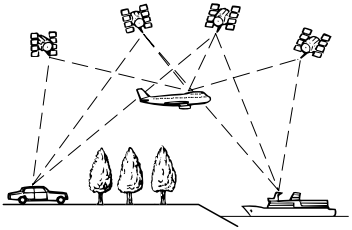
Positioning Technology

The navigation system accurately measures your current location by combining the positioning by GPS and by Dead Reckoning.

Positioning by GPS

The Global Positioning System (GPS) uses a network of satellites orbiting the Earth. Each of the satellites, which orbit at a height of 68 900 000 feet (21 000 km), continually broadcasts radio signals giving time and position information. This ensures that signals from at least three can be picked up from any open area on the ground's surface.

The accuracy of the GPS information depends on how good the reception is. When the signals are strong and reception is good, GPS can determine latitude, longitude, and altitude for accurate positioning in three dimensions. But if signal quality is poor, only two dimensions, latitude and longitude, can be obtained and positioning errors are somewhat greater.



Positioning by dead reckoning

The 3D Hybrid Sensor in the navigation system also calculates your position. The current location is measured by detecting driving distance with the speed pulse, the turning direction with the Gyrosensor, and inclination of the road with the G sensor.

The 3D Hybrid Sensor can even calculate changes of altitude, and corrects for discrepancies in the distance traveled caused by driving along winding roads or up slopes. Also, the navigation system learns the driving conditions and stores information in the memory; thus, as you drive more, the precision of the positioning becomes more accurate.

The method of positioning changes as follows depending on whether the speed pulse of your vehicle is detected or not:

3D hybrid mode
This is active when the speed pulse is detected. Inclination of a street can be detected.

Simple hybrid mode
When the speed pulse is not detected, positioning is performed in this mode. Only horizontal movement is detected, so it becomes less accurate. Also, when the positioning by GPS is not available, such as when your vehicle enters a long tunnel, the discrepancy between your actual and calculated position may become bigger.

- ❒ The speed pulse data comes from the speed sensing circuit. The location of this speed sensing circuit depends on your vehicle model. In some cases, it is impossible to make a connection to it, and in such a case we recommend that the ND-PG1 speed pulse generator (sold separately) be used.

How do GPS and dead reckoning work together?

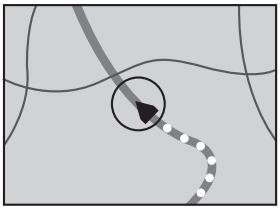
For maximum accuracy, your navigation system continually compares GPS data with your estimated position as calculated from the data of 3D Hybrid Sensor. However, if only the data from the 3D Hybrid Sensor is available for a long period, positioning errors are gradually compounded until the estimated position becomes unreliable. For this reason, whenever GPS signals are available, they are matched with the data of the 3D Hybrid Sensor and used to correct it for improved accuracy.

To ensure maximum accuracy, the dead reckoning system learns with experience. By comparing the position it estimates with your actual position as obtained using GPS, it can correct for various types of error, such as tire wear and the rolling motion of your vehicle. As you drive, the dead reckoning system gradually gathers more data, learns more, and the accuracy of its estimates gradually increases. So, after you have driven some distance, you can expect your position as shown on the map to show fewer errors.

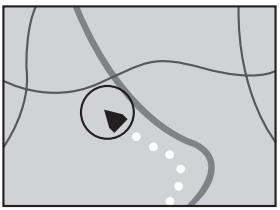
- ❒ If you use chains on your wheels for winter driving or put on the spare wheel, errors may suddenly increase because of difference in wheel diameter. The system detects the fact that the tire diameter has changed, and automatically replaces the value for calculating distance.
- ❒ If the ND-PG1 is used or if your vehicle is operating in Simple hybrid mode, the distance calculation value cannot be replaced automatically.

Map matching

As mentioned, the GPS and dead reckoning systems used by this navigation system are susceptible to certain errors. Their calculations may, on occasion, place you in a location on the map where no road exists. In this situation, the processing system understands that vehicles travel only on roads, and can correct your position by adjusting it to a nearby road. This is called map matching.



With map matching



Without map matching

Handling Large Errors

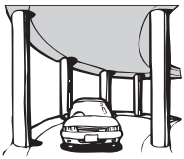
Positioning errors are kept to a minimum by combining GPS, Dead Reckoning, and map matching. However, in some situations, these functions may not work properly, and the error may become bigger.

When the positioning by GPS is impossible

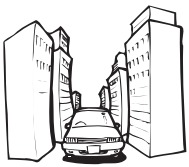
- If signals cannot be received from more than two GPS satellites, GPS positioning does not take place.
- In some driving conditions, signals from GPS satellites may not reach your vehicle. In this case, it is impossible for the system to use GPS positioning.



In tunnels or enclosed parking garages



Under elevated roads or similar structures



When driving among high buildings



When driving through a dense forest or tall trees

- If a car phone or cellular phone is used near the GPS antenna, GPS reception may be lost temporarily.
- Do not cover the GPS antenna with spray paint or car wax, because this may block the reception of GPS signals. Snow buildup can also degrade the signals, so keep the antenna clear.

❒ If, for any reason, GPS signals cannot be received, learning and error correction are not possible. If GPS positioning has been operating for only a short time, your vehicle's actual position and the current location mark on the map may diverge considerably. Once GPS reception is restored, accuracy will be recovered.

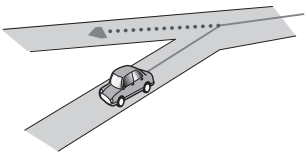
Vehicles that Cannot Obtain Speed Pulse Data

❒ The speed pulse data comes from the speed sensing circuit. The location of this speed sensing circuit depends on your vehicle model. In some cases, it is impossible to make a connection to it, and in such a case we recommend that the ND-PG1 speed pulse generator (sold separately) be used.

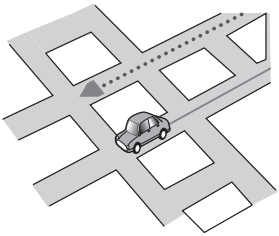
Conditions Likely to Cause Noticeable Positioning Errors

For various reasons such as the state of the road you are traveling on and the state of reception of the GPS signal, the actual position of your vehicle may differ from the position displayed on the map screen.

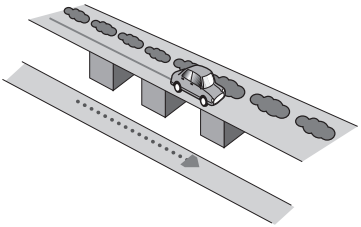
- If you make a shallow turn.



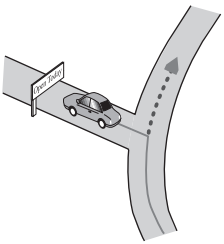
- If there is a parallel road.



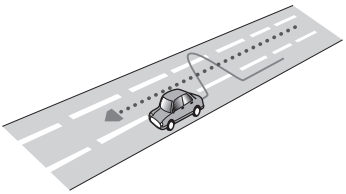
- If there is another road very nearby, such as in the case of an elevated freeway.



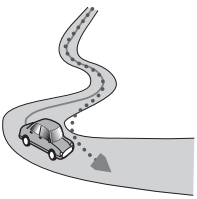
- If you take a recently opened road that is not on the map.



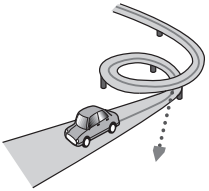
- If you drive in zig-zags.



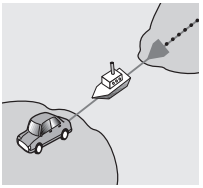
- If the road has connected hairpin bends.



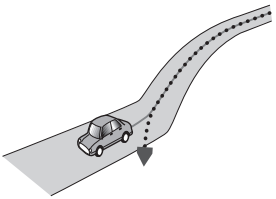
- If there is a loop or similar road configuration.



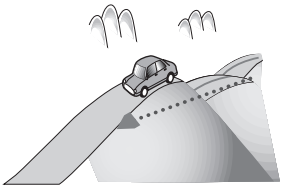
- If you take a ferry.



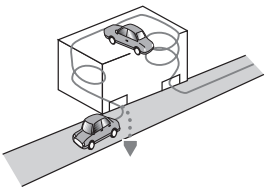
- If you are driving on a long, straight road or a gently curving road.



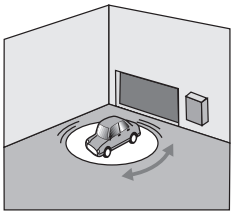
- If you are on a steep mountain road with many height changes.



- If you enter or exit a multi-storey parking lot or similar using a spiral ramp.



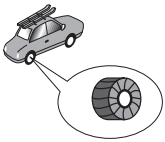
- If your vehicle is turned on a turntable or similar structure.



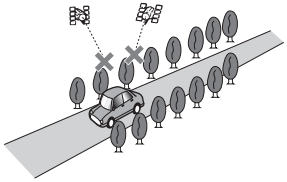
- If your vehicle's wheels spin, such as on a gravel road or in snow.



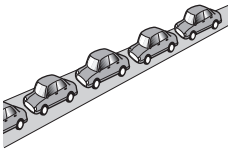
- If you put on chains, or change your tires for ones with a different size.



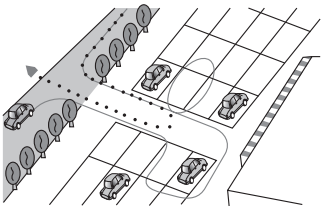
- If trees or other obstacles block the GPS signals for a considerable period.



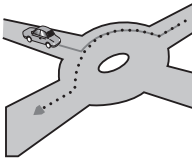
- If you drive very slowly, or in a start-and-stop manner, as in a traffic congestion.



- If you join the road after driving around a large parking lot.



- When you pass around a traffic circle.



- When starting driving immediately after starting the engine.
- If you turn your navigation system on while driving.

Some types of vehicles may not output a speed signal while driving at just a few kilometers per hour. In such a case, the current location of your vehicle may not be displayed correctly while in a traffic congestion or in a parking lot.

Troubleshooting

If you have problems operating your navigation system, refer to this section. The most common problems are listed below, along with likely causes and solutions. While this list is not comprehensive, it should answer your most common problems. If a solution to your problem cannot be found here, contact your dealer or the nearest authorized Pioneer service facility.

Problems in the screen

Symptom	Cause	Action (See)
Power doesn't turn on. The navigation system doesn't operate.	Leads and connectors are incorrectly connected.	Confirm once more that all connections are correct.
	The fuse is blown.	Rectify the reason for the fuse blowing, then replace the fuse. Be very sure to install a correct fuse with the same rate.
	Noise and other factors are causing the internal memory to operate incorrectly.	Refer to "Returning the Navigation System to the Default or Factory Settings" and carry out appropriate cares. (→ Page 175)
	The hard disk drive can not work because the temperature is extremely low or high.	Wait until the temperature inside the vehicle falls or rises.
When the ignition switch is turned ON (or turned to ACC), the motor sounds.	This system confirms whether a disc is loaded or not.	This is a normal operation.
The navigation does not boot up.	The power cable is not wired correctly.	Turn the system off and the check the wiring.
	The hard disk drive cannot run because the temperature is too low.	Wait until the inside of the vehicle warms up.
	The hard disk drive is defective.	Consult your authorised Pioneer dealer.
You cannot position your vehicle on the map or the positioning error is large.	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Such a loss of signal quality may happen for the following reasons: • The GPS antenna is in an unsuitable location. • Obstacles are blocking signals from the satellites. • The position of satellites relative to your vehicle is bad. • Signals from the GPS satellites have been modified to reduce accuracy. (GPS satellites are operated by the US Department of Defense, and the US government reserves the right to distort positioning data for military reasons. This may lead to greater positioning errors.) • If a vehicle phone or cellular phone is used near the GPS antenna, GPS reception may be lost temporarily. • Do not cover the GPS antenna with spray paint or vehicle wax, because this may block the reception of GPS signals. Snow buildup can also degrade the signals.	Check the GPS signal reception (→ Page 93) and the position of the GPS antenna if necessary, or continue driving until reception improves. Keep the antenna clear.

Symptom	Cause	Action (See)
	Signals from the vehicle's speed pulse are not being picked up properly.	Check that the cables are properly connected. If necessary, consult the dealer that installed the system.
	The navigation system may not be mounted securely in your vehicle.	Check that the navigation system is securely mounted and, if necessary, consult the dealer that installed the system.
	Your vehicle is operating in Simple hybrid mode.	Connect the speed signal input (pink lead wire) of the power cable correctly, and reset the 3D Hybrid Sensor memory ([**Learning Status**]).
	The navigation system is installed with an extreme angle exceeding the limitation of the installation angle.	Confirm the installation angle. (The navigation system must be installed within the allowed installation angle. For details, refer to "Installation Manual" and [**Installation Angle Setup**] on page 94.)
	Indication of the position of your vehicle is misaligned after a U-turn or reversing.	Check whether or not the reverse gear signal input lead (purple) is connected properly. (The navigation system works properly without the lead connected, but positioning accuracy will be adversely affected.)
The map continually reorients itself.	The traveling direction is always set to Heading Up.	Touch on the screen and change the map display.
The daylight display is used even when the vehicle lights are on.	[**Daytime**] is selected to [**Day/Night Display**].	Check the [**Day/Night Display**] setting (→ Page 49) and make sure [**Automatic**] is selected.
	The orange/white lead is not connected.	Check the connection.
The display is very dim.	The vehicle's light is turned ON, and [**Nighttime**] is selected on [**Day/Night Display**].	Read about the [**Day/Night Display**] setting (→ Page 49) and, if desired, select [**Daytime**].
	The vehicle cabin temperature is extremely low.	A Liquid Crystal Display (LCD) is used, and such displays tend to darken when cold. Wait for the vehicle to warm up.
	Picture quality adjustment of the display is not correct.	Refer to "Operating the Picture Adjustment" (→ Page 158) to adjust the picture quality.
	Display tilt is not proper setting.	Press and hold **EJECT** button to adjust the tilt.
No sounds are heard. The volume level will not rise.	The volume level is low.	Adjust the volume level.
	The attenuator or mute is on.	Turn the attenuator or mute off.
	The speaker lead is disconnected.	Check the connection.
Volume of beeps and navigation guidance cannot be adjusted.	You cannot adjust these parameters with the **VOL (▲/▼)** button.	Turn the volume up or down with [**Volume**] in the [**Settings**] menu.
Adjusting the volume of navigation guidance and beep is not possible.	You cannot adjust them with the **VOL (▲/▼)** button.	Turn the volume up or down according to [**Volume**] (→ Page 91) in the Settings menu.
A strange sound is heard when the vehicle comes close to a certain place. (E.g. Dog barking)	The sound for the registered location is set.	Set the sound of that registered location to [**No Sound**]. (→ Page 64)
Slope is not displayed on the **Vehicle Dynamics** screen. **Inclination** does not move on the **3D Calibration** screen.	The speed pulse lead is not connected.	Connect the speed pulse lead.

Symptom	Cause	Action (See)
No sound, no voice.	"Guide Mute" has been set, or sound volume is reduced to 0.	Adjust the volume of the guidance or turn "Guide Mute" off. Refer to "Setting the volume Related to the Guidance and Phone" (→ Page 91).

When the screen is frozen...

Park your vehicle at a safe place, and cut off the engine. Turn the ignition key back to "Acc off". Then start the engine again, and turn the power to the navigation system back on. If this does not solve the problem, press the **RESET** button on the navigation system.

Symptom	Cause	Action (See)
CD or DVD playback is not possible.	The disc is inserted upside down.	Insert the disc with the label upward.
	The disc is dirty.	Clean disc.
	The disc is cracked or otherwise damaged.	Insert a normal, round disc.
	The files on the CD are an irregular file format.	Check the file format. (Refer to [Handing and care of the disc] on the Hardware Manual.)
	The CD format cannot be played back.	Replace disc. (Refer to [Handing and care of the disc] on the Hardware Manual.)
	The loaded disc is a type this system cannot play.	Check what type the disc is. (→ Hardware Manual)
No picture.	The parking brake lead is not connected or applied.	Connect a parking brake lead correctly, and apply the parking brake.
	Parking brake interlock is activated.	Park your vehicle in the safe place and apply the parking brake. ➲ Parking brake interlock → Page 18
	[**AV Input**] setting is incorrect.	Please read the following page and set the setting correctly. → Page 143
Audio skipping.	The navigation system is not firmly secured.	Secure the navigation system firmly.
	Failure hard disk drive.	Consult your Pioneer dealer.
"Rear display" picture disappears.	The setting for [**REAR SCREEN**] is incorrect.	Please read the following page and set the rear screen setting correctly. → Page 157
	There was a problem with the "Rear display" or a faulty wiring connection, for example.	Check the "Rear display" and its connection.
	When the shift lever is in [R], displays rear view camera images. (When [**MIRROR**] is selected in **REAR SCREEN** menu.)	Select [**DVD**] or [**AV**] in **REAR SCREEN** menu. When you move the shift lever other than [R] position, the screen will be returned to the previous display.
	[**DVD-V Setup**] is carried out	You can not display the video image to "Rear display" during [**DVD-V Setup**] menu.

Symptom	Cause	Action (See)
Nothing is displayed and the touch panel keys cannot use.	The setting for the rear view camera is incorrect.	Connect a rear view camera correctly.
	The shift lever was placed in [R] when the rear view camera was not connected.	Press the **AV** button to return to the source display and then select the correct polarity setting for **Camera Input**. ➲ About **Camera Input** setting ➞ Page 154
	The back light of the LCD panel is turned off.	Press the **V** button to turn on the back light.
Touch panel key is not respond or different key is respond.	Touch keys deviate from the actual positions that respond to your touch for some reason.	Perform the touch panel calibration. "Adjusting the Response Positions of the Touch Panels (Touch Panel Calibration)" ➞ Page 178
CD recording is not possible.	The disc cannot record, such as MP3 disc, DVD-video, is inserted.	The disc other than normal music CD can not be recorded.
CD recording doesn't stop though the record progress indicator shows 100%.	Music Library recording will be canceled after playback of the current track is finished. (The recording mode stops at the interval of the tracks.)	Wait until the current track is ended or change the source manually.
"NO SIGNAL" is displayed at the right corner on the map.	While waiting for a response from the XM tuner.	Wait for a while and try the operation again.
	You are in an area that cannot receive XM tuner reception.	Move into an area that can receive XM tuner reception.
	Your current location provides very poor reception.	Change your location.
"UPDATING" is displayed at the right corner on the map.	Service subscription is either XM audio only or XM NavTraffic stand alone.	Since the GEX-P10XMT is capable of receiving both XM audio and XM NavTraffic service, if you are subscribed to only one or the other, the system checks to see if you have added another service to your account since you last powered on the navigation system. When you subscribe to both services, this message will stop appearing when you turn the ignition ON (ACC ON).

Messages and How to React to Them

Messages for navigation functions

The following messages may be displayed by your navigation system.

❒ There are occasions when you may see error messages other than those shown here. In such a case, follow the instructions given on the display.

Message	When	What to do
Irregular speed pulse signal detected. Please power off the system and check the installation. Then, please re-boot the system and press "OK".	If the navigation system does not receive the vehicle speed pulse.	Consult your Pioneer dealer.
Speed pulse not connected. Calibration will start without speed pulse. Accuracy is not fully ensured without speed pulse.	The speed signal input (pink lead wire) of the power cable is not connected.	To operate with 3D hybrid mode, connect the speed signal input (pink lead wire) of the power cable correctly. Although it can be operated with Simple hybrid mode without connecting the speed signal input, the precision of the positioning will be less accurate.
Vibration detected. Please power off the system and check the installation. Then, please re-boot the system and press "OK".	The navigation unit is installed in a place where it may be affected by a large vibration.	Re-install the navigation unit in a place where the unit will not be affected by vibration.
Direction of G sensor is not correct. Please power off the system and check the installation. Then, please re-boot the system and press "OK".	Direction of G sensor is set incorrectly.	See the Installation Manual and set the direction of the navigation unit correctly.
Gyro Sensor is not working properly. Please consult your dealer or Pioneer service center.	Abnormal output of Gyrosensor is detected.	Note down the error code shown on the screen; turn off the power, and then contact your nearest Pioneer service facility.
Positioning is not possible due to the hardware. Please contact your dealer or Pioneer service center.	The location display is not possible due to failure of hardware.	Consult your dealer.
GPS antenna problem detected. Please contact your dealer or Pioneer service center.	The location display is not possible due to failure of GPS antenna.	Consult your dealer.
This function is not available now.	The screen cannot be displayed with **Vehicle Dynamics** Display. Because the sensor has not been taught so the sensor information cannot be acquired.	If the sensor learning status reaches the Sensor Initializing status or more, the system is ready to be used.
The vertical installation angle is changed. Gyro Sensor calibration is re-initialized.	If the mounting angle of the Hideaway unit has been changed.	The system initializes the sensor in order to operate it with the maximum performance and automatically starts re-learning.
Excess vertical installation angle detected. Please install the navigation unit correctly.	The navigation system is installed with an extreme angle exceeding the limitation of the installation angle.	Confirm the installation angle. (The navigation system must be installed within the allowed installation angle. For details, refer to Installation Manual.)
No data available at this time.	If no data is available that can be used with the XM tuner.	Wait for a while and try the operation again.
"UPDATING" is displayed at the right corner on the map	Radio is being updated with the latest encryption code.	Wait until the encryption code is fully updated.

Message	When	What to do
UPDATING (Updating)	The selected channel is not included in your subscription.	Select another channel.
	Radio is being updated with the latest encryption code.	Wait until the encryption code is fully updated.
Route calculation was not possible.	Route calculation has failed because of malfunction of map data, software, hardware.	• Change the destination. • Consult the Pioneer Local dealer if this message persists.
Route calculation was not possible because the destination is too far.	If the destination is too far.	• Set a destination closer to the starting point. • Set one or more waypoints.
Route calculation was not possible because the destination is too near.	The destination or waypoint(s) are too close.	Set a destination [and waypoint(s)] farther from the starting point.
Route calculation was not possible due to traffic regulations.	• The destination or waypoint(s) are in a Control Traffic Zone (CTR) and the route calculation is hampered. • Your vehicle is currently in a Control Traffic Zone (CTR) and the route calculation is hampered.	• Set a destination and waypoint(s) outside the CTR if you know where the restricted area is. • Try the destination or waypoint(s) away from the currently set points to some extent. • Drive your vehicle to an unrestricted area and reset the destination and waypoint(s).
Route calculation was not possible because no guidance can be provided around the destination or the starting point.	The destination, waypoint(s), or starting point are in an area where no road exists (e.g. a mountain) and the route calculation is impossible.	• Set a destination and waypoint(s) on roads. • Reset the destination after you drive the vehicle to any road.
Route to destination cannot be calculated.	The destination or waypoint(s) are in an isolated island, etc. without a ferry and the route calculation is impossible. If there is no road connect to your starting point or destination, this message will appear.	Change the destination.
• Ferry could not be avoided. • Toll road could not be avoided. • Freeways could not be avoided. • Toll roads, ferries and freeways could not be avoided. • Toll roads and ferries could not be avoided. • Toll roads and freeways could not be avoided. • Ferries and freeways could not be avoided.	In case a ferry route, toll roads or freeways are included in the route to the destination or waypoints even though a route is set to avoid them. You can recognize these condition by icon. ➲ "Checking and fixing the route" → Page 30	If the current route is not desired, set destination or waypoints that do not pass through a ferry route, toll roads or freeways.
The address does not exist. Do you want to continue?	If the house number entered does not exist in the database for the specified street.	Re-enter the existing house number. Or, proceed to the next step without entering the house number and set the main point of that street as your destination.
This area does not contain any POI's of the selected type.	Facilities of the selected category do not exist in the surrounding areas.	Use another search method or move to another location and perform the [**Vicinity Search**] again.
Failed to make the route profile.	In rarely case the route calculation error may occur.	• Retry. • Consult the Pioneer Local dealer if this message persists.
There is no Traffic List.	There is no available traffic information now.	Move to the location where you can receive the XM NavTraffic information, and then try the operation again.
There is no /Pictures/ folder. Please create /Pictures/ folder and store JPEG files in that Folder.	Cannot load the image because the **Pictures** folder is not found in the inserted disc.	Use the appropriate data after reading "Limitations for import the picture" on page 97.

Message	When	What to do
Data read error.	Failed to read the data because the CD-R is damaged or dirty. Or, the pick-up lens of the DVD drive is dirty.	Try re-reading the data by inserting a clean CD-R. Clean the pick-up lens with a commercially available cleaning kit for DVD, then try to reading again.
	The **Pictures** folder exists on the CD-R but no data in JPEG format exists.	Use the appropriate data after reading “Limitations for import the picture” on page 97.
JPEG file is corrupt.	The data is damaged or an attempt was made to set a JPEG image, that is out of specifications, as the background picture.	Use the appropriate data after reading “Limitations for import the picture” on page 97.
CAUTION! System detected improper connection of Parking Brake lead. Please check your configuration for safety. Please see Operation Manual for more information regarding safe operation.	Parking brake lead is incorrectly connected.	Confirm once more that their connections are correct.
Connection failed.	• The mobile phone’s Bluetooth wireless technology is turned off . • The mobile phone is pared (connected) with another device. • Rejection by the mobile phone has received. • The target mobile phone can not be found. • Registration step has been successful but connection is fail for some reason.	• Turn the target phone’s Bluetooth wireless technology on. • Cancel the paring (connection) and retry. • Operate target phone and accept the connection request from the navigation system. (Furthermore, check the setting related connection on your mobile phone.) • Check whether your mobile phone is turned off or not, whether the distance to your mobile phone is too far or not. • Retry the registration and if a connection still cannot be established, try connecting using your mobile phone.
Registration failed.	• The mobile phone’s Bluetooth wireless technology is turned off during the registration step. • Rejection by the mobile phone has received. • Registration step is fail for some reason.	• Keep turning the target phone’s Bluetooth wireless technology on during the registration. • Operate target phone and accept the registration request from the navigation system. (Furthermore, check the setting related connection on your mobile phone. • Retry the registration and if a registration still cannot be failed, try registering using your mobile phone.
Automatic connection in progress. Please try again later	If you try to perform another operation during automatic connection by the system.	• Wait for a while and retry. • Establish that connection temporarily and retry that later.
Automatic connection in progress. Please try manually later	If you try to connect another phone during automatic connection by the system.	Establish that connection temporarily and retry that later.
Could not find any available phone.	No available phone is exist on the surroundings when the system search the mobile phone featuring Bluetooth wireless technology for registration.	• Turn the target phone’s Bluetooth wireless technology on. • Check whether your mobile phone is turned off or not, whether the distance to your mobile phone is too far or not.

Message	When	What to do
Bluetooth unit error. It is not possible to find any cell phones.	If the Bluetooth unit is disconnected from this navigation system or Bluetooth unit carry out another processing when the system search the mobile phone featuring Bluetooth wireless technology for registration.	• Check the connection and retry. • Establish that connection temporarily and retry that later.
Bluetooth unit error. The device name could not be set.	If the Bluetooth unit is disconnected from this navigation system or Bluetooth unit carry out another processing when you change the device name.	• Check the connection and retry. • Establish that connection temporarily and retry that later.
Registration is not available.	If you try to perform another operation immediately after failure the connection.	Wait for a while and retry.
Reading failed.	• If you transferred the data from your mobile phone by a format can not be received with navigation system. • Disconnection has been made during transfer for some reason.	• Select just a suitable item, format and then retry. • Connect your mobile phone again and retry.
Calibration failed. Please refer to the owner's manual.	The touch panel calibration has not been carried out with appropriate steps.	Please read the instruction of touch panel calibration and retry. → Page 178
The HDD is not connected.	Failure of the built-in hard disk drive occur, such as internal electrical problem or file system error, etc.	Consult your dealer.
Cannot use HDD.	Failure of the built-in hard disk drive occur, such as internal electrical problem or file system error, etc.	Consult your dealer.
There is no applicable program.	Failure of the built-in hard disk drive occur, such as internal electrical problem or file system error, etc.	Consult your dealer.
The HDD cannot be operated due to excessive heat. Please turn off power immediately. Before using the system again, please change the location of the vehicle.	Hard disk drive can not run due to high temperature.	Park your vehicle to safe place, turn the ignition switch off and wait until the temperature inside the vehicle drops.

Messages for Audio functions

When problems occur in the audio source, a message may appears on the display. Refer to the table below to identify the problem, then take the suggested corrective action. If the error persists, contact your dealer or your nearest PIONEER Service Center.

Built-in DVD drive

Message	When	What to do
Unreadable disc.	If you try to use a disc which is incompatible with this system.	Insert a suitable disc.
	If you insert a disc upside down.	Insert the disc with the label upward.
	If the disc is dirty.	Clean the disc.
	If the disc is cracked or otherwise damaged.	Insert a normal, round disc.
	Mechanical failure of DVD drive occur.	Consult your Pioneer dealer.
Playback error. Please remove the disc.	Electrical or mechanical error is occur.	Press the **RESET** button. ("Hardware manual" after reading page 175 in this manual.)
Region code error	The disc does not have the same region number as the navigation system.	Replace the DVD-Video with one bearing the correct region number.
Playback error due to irregular temperature. Please remove the disc.	The temperature of built-in DVD drive is out of the operating limits.	Park your vehicle to safe place, turn the ignition switch off and wait until the built-in DVD drive's temperature returns to within normal operating limits.
ATTENTION! Viewing of front seat video source while driving is strictly prohibited.	Parking brake interlock is activated.	Park your vehicle in the safe place and apply the parking brake. ➲ Parking brake interlock ➞ Page 18
Search error	If the title number, chapter number, time, 10 key command, which you enter in [10Key Search] are not exist. (This message will appear when DVD drive can not accept that command.)	Enter the available numbers or 10 key command or use another search method.

Hard disk drive (Music Library)

Message	When	What to do
This CD cannot be recorded	If you insert a CD which prohibit second-generation copies or duplicate.	Use another CD and retry.
• Recording error. Switching to CD playback mode • Recording error. Recording is stopped • The recording was unstable. Restart the recording from the beginning of the track.	If recording can not be carried out with skipping certain part of the disc continuously because the disc is dirty, scratched, otherwise damaged, the pick-up lens of the DVD drive is dirty, or the extreme vibration occur continuously.	• Clean the disc and retry. • Clean the pick-up lens with a commercially available cleaning kit for DVD, then retry. • Retry in vibration-free condition.
Exceeded playlist maximum. No more playlists can be recorded.	If you try to record a new CD but the playlists are maximum number. (The album playlist can be stores up to 400.)	Delete some playlist and retry.
Playback error. Music Library cannot be played	The music library component is abnormal.	Consult your dealer.
MyMix cannot store more than 99 tracks.	If you try to add the tracks but the MyMix playlists are maximum number. (The MyMix playlist can store the tracks up to 99.)	Delete some tracks and retry.

Message	When	What to do
This track cannot be added to MyMix	The music library component is abnormal.	Consult your dealer.
Name can not be used for voice recognition. Try again.	In case some invalid character have been entered and the system can not convert it appropriate pronunciation.	Enter the different characters so that the system can pronounce that.
Single recording mode will only record the first track of CD	Record the tracks other than the first track of CD when the recording mode is [**Single**].	When you set [**Single**] in [**REC Mode**], the system only can record the first track of CD. Set [**Auto**] or [**Manual**] in [**REC Mode**] and retry. (→ Page 156)
This CD cannot be recorded	If you insert a CD which prohibit second-generation copies or duplicate.	Use another CD and retry.
HDD is full. This CD cannot be recorded	There is no free space for recording in the hard disk drive.	Delete some tracks or playlist and try again if you want to record that CD.
Unable to select appropriate Track info due to multiple entries in the database.	Some corresponded data is found in Gracenote® Database, the system cannot select one to append a title.	Enter the title manually, or try to retrieve the title by touching [**Update title**].
All artist names in the playlist are deleted because no character is entered. Do you want to proceed?	If you try to delete the artist name entirely. The artist will not be displayed in the artist group and artist name on the information plate also will not be displayed.	If you enter the artist name again, the artist name appears.

Other sources

Message	When	What to do
Search failed.	iPod is preparing playback. Therefore, the operation is invalid now.	Wait until [**Ready**] disappear and try the operation.
Invalid command - the memo has not been stored.	• If you try to memorize 000 Channel to MyMix. • If you try to memorize the channel which is OFF AIR to MyMix. • If you try to memorize the channel to MyMix while the error of XM tuner occur.	Tune the appropriate channel and memorize that.
Invalid command - the CH has not been stored.	• If you try to memorize 000 or 001 Channel to TRFC button 's preset. • If you try to memorize the channel which is OFF AIR to TRFC button 's preset. • If you try to memorize the channel to TRFC button 's preset while the error of XM tuner occur.	Tune the appropriate channel and memorize that.

When the hard disk drive is disconnected

If there is no hard disk drive because of the repair or service, you can operate Radio source only without the hard disk drive.



Only following operation is available. Other functions can not operate.

- Only FM, AM source can operate. (Preset station select and can not operate.)
- If the selected source before ejecting the hard disk drive is [**AV**]. [**AV input**] source is available on “Rear display”. (If the selected source is [**DVD**], nothing is output to “Rear display”. If the selected source is [**MIRROR**], Same image as “Front display” is output to “Rear display”.)
- Rear view camera is available only when the vehicle is backing up. ([**Rear View**] is not available.)

Route Setting Information

Route search specifications

Your navigation system sets a route to your destination by applying certain built-in rules to the map data. This section provides some useful information about how a route is set.

⚠ CAUTION

- **When a route is calculated, the route and voice guidance for the route is automatically set. Also, for day or time traffic regulations, only information about traffic regulations at the time when the route was calculated is shown. One-way streets and street closures may not be taken into consideration. For example, if a street is open during the morning only, but you arrive later, it would be against the traffic regulations so you cannot drive along the set route. When driving, please follow the actual traffic signs. Also, the system may not know some traffic regulations.**

- The calculated route is one example of the route to your destination decided by the navigation system whilst taking the type of streets or traffic regulations into account. It is not necessarily an optimum route. (In some cases, you may not be able to set the streets you want to pass. If you need to pass a certain street, set the waypoint on that street.)
- The route set by your navigation system may not use the streets known to local drivers, such as small streets or special roads.
- Some route options may become the same route. If waypoints are set, only one route is calculated.
- If the destination is too far, there may be instances where the route cannot be set. (If you want to set a long-distance route going across several areas, set waypoints along the way.)
- During voice guidance, turns and intersections from the freeway are announced. However, if you pass intersections, turns, and other guide points in rapid succession, some may not be announced.
- It is possible that guidance may direct you off a freeway and then back on again.

- In some cases, the route may require you to travel in the opposite direction to your current heading. In such cases, you are instructed to turn around, so please turn around safely by following the actual traffic rules.
- In some cases, guidance may direct you past your destination and then indicate a U-turn to get back to it.
- In some cases, a route may begin on the opposite side of a railway or river from your actual current location. If this happens, drive towards your destination for a while, and try route calculation again.
- When there is a traffic congestion or closure ahead, if driving through the traffic congestion or closure is better than taking the detour, a detour route may not appear.
- There may be instances when the starting point and the destination point are not on the highlighted route.
- The number of traffic circle exits displayed on the screen may differ from the actual number of roads.

Auto Reroute

- Auto Reroute is used when you deviate more than 0.01 mi (Approx. 15m) from the route.
- The Auto Reroute function does not work in the following cases:
  - when your vehicle is not on a street
  - when you are too close to your destination
  - when your vehicle is on a ferry
  - when driving on a road inside a facility
  - when driving on a traffic circle
  - when driving on the routes are described in [Roads not used in calculations]

Route highlighting

- Once set, the route is highlighted in bright green or light blue on the map.
- The immediate vicinity of your starting point and destination may not be highlighted, and neither will areas with particularly complex road layouts. Consequently, the route may appear to be cut off on the display, but voice guidance will continue.

Roads not used in calculations

Even though displayed onscreen, the following roads are not included in route calculations.

- Walkway
- Public vehicle only
- Non access road

➲ "Browsing the Map Color Explanation" ➞ Page 48

Tracking

- Your navigation system marks your course on the map in certain increments. This is called tracking. It is handy when you want to check a route traveled without guidance or if returning along a complex route.
- A maximum of about 155 miles (250 km) is marked and, as you travel beyond this limit, tracking marks are erased in order from the most distant. Tracking display shows about 100 miles tracking of your vehicle with white dots.

➲ Tracking can also be set for automatic erasing whenever the navigation system is switched off ➞ Page 45

Displaying POI

Points of Interest (POI) that can be displayed on the enlarged map of the intersection or [**Driver's View**] (left screen) are only the special Points of Interest (POI) that contain the position information. Not all of Points of Interests (POI) are displayed.

Glossary

This glossary explains some of the terms used in the manual.

3D Hybrid sensor
The built-in sensor which enables the system to estimate your vehicle's position. A learning function increases its accuracy and its learning data can be stored in memory.

Address Book
A list of previously searched destinations, waypoints and locations registered manually.

Aspect ratio
This is the width-to-height ratio of a TV screen. A regular display has an aspect ratio of 4:3. Wide screen displays have an aspect ratio of 16:9, providing a bigger picture for exceptional presence and atmosphere.

Bit rate
This expresses data volume per second, or bps units (bits per second). The higher the rate, the more information is available to reproduce the sound. Using the same encoding method (such as MP3), the higher the rate, the better the sound.

Chapter
DVD titles are in turn divided into chapters which are numbered in the same way as the chapters of a book. With DVD-Video discs featuring chapters, you can quickly find a desired scene with chapter search.

Current location
The present location of your vehicle; your current location is shown on the map by a red triangle mark.

Default setting
A factory setting which applies when you first switch on the system; you can change default settings to suit your own needs in the Route Options menu or the Settings menu.

Destination
A location you choose as the end point of your journey.

Dolby Digital
Dolby Digital provides multi-channel audio from up to 5.1 independent channels. This is the same as the Dolby Digital surround sound system used in theaters.

DTS
This stands for Digital Theater Systems. DTS is a surround system delivering multi-channel audio from up to 6 independent channels.

Favorite location
A frequently visited location (such as your workplace or a relative's home) that you can register to allow easy routing.

GPS
Global Positioning System. A network of satellites that provides navigation signals for a variety of purposes.

Gracenote® Music recognition service
Music recognition technology and related data are provided by Gracenote®. Gracenote is the industry standard in music recognition technology and related content delivery. For more information visit www.gracenote.com.

Guidance mode
The mode in which guidance is given as you drive to your destination; the system automatically switches to this mode as soon as a route has been set.

Guidance point
These are important landmarks along your route, generally intersections. The next guidance point along your route is indicated on the map by the yellow flag icon.

Home location
Your registered home location.

ID3 tag
This is a method of embedding track-related information in a MP3 file. This embedded information can include the track title, the artist's name, the album title, the music genre, the year of production, comments and other data. The contents can be freely edited using software with ID3 Tag editing functions. Although the tags are restricted to the number of characters, the information can be viewed when the track is played back.

ISO9660 format
This is the international standard for the format logic of CD-ROM folders and files. For the ISO9660 format, there are regulations for the following two levels.

Level 1:
The file name is in 8.3 format (the name consists of up to 8 characters, half-byte English capital letters and half-byte numerals and the [_] sign, with a file-extension of three characters.)

Level 2:
The file name can have up to 31 characters (including the separation mark [.] and a file extension). Each folder contains less than 8 hierarchies.

Extended formats
Joliet:
File names can have up to 64 characters.
Romeo:
File names can have up to 128 characters.

Linear PCM (LPCM)/Pulse code modulation
This stands for linear pulse code modulation, which is the signal recording system used for music CDs and DVDs. Generally, DVDs are recorded with higher sampling frequency and bit rate than CDs. Therefore, DVDs can provide higher sound quality.

m3u
Playlists created using the [WINAMP] software have a playlist file extension (.m3u).

Menu
A list of options shown on the display; choices are selected touching the display.

MP3
MP3 is short for MPEG Audio Layer 3. It is an audio compression standard set by a working group (MPEG) of the ISO (International Standards Organization). MP3 is able to compress audio data to about 1/10th the level of a conventional disc.

MPEG
This stands for Moving Pictures Experts Group, and is an international “Video image” compression standard. Some DVDs feature digital audio compressed and recorded using this system.

Multi-angle
With regular TV programs, although multiple cameras are used to simultaneously shoot scenes, only images from one camera at a time are transmitted to your TV. Some DVDs feature scenes shot from multiple angles, letting you choose your viewing angle as desired.

Multi-audio (Multilingual dialog)
Some DVDs feature dialog recorded in multiple languages. Dialog in up to 8 languages can be recorded on a single disc, letting you choose as desired.

Multi-session
Multi-session is a recording method that allows additional data to be recorded later. When recording data on a CD-ROM, CD-R or CD-RW, etc., all data from beginning to end is treated as a single unit or session. Multi-session is a method of recording more than 2 sessions in one disc.

Multi-subtitle
Subtitles in up to 32 languages can be recorded on a single DVD, letting you choose as desired.

Optical digital output
By transmitting audio signals in a digital signal format, the chance of sonic quality deteriorating in the course of transmission is minimized. An optical digital output is designed to transmit digital signals optically.

Packet write
This is a general term for a method of writing on CD-R, etc. at the time required for a file, just as is done with files on floppy or hard discs.

Parental lock
Some DVD-Video discs with violent or adult-oriented scenes feature parental lock which prevents children from viewing such scenes. With this kind of disc, if you set the unit's parental lock level, playback of scenes inappropriate for children will be disabled, or these scenes will be skipped.

Point of Interest (POI)
Point Of Interest; any of a range of locations stored in the data, such as railway stations, shops, restaurants, and amusement parks.

Region number
DVD players and DVD discs feature region numbers indicating the area in which they were purchased. Playback of a DVD is not possible unless it features the same region number as the DVD player. The navigation system's region number is displayed on the bottom of the display unit.

Route setting
The process of determining the ideal route to a specific location; route setting is done automatically by the system when you specify a destination.

Set route
The route marked out by the system to your destination. It is highlighted in bright green on the map.

Title
DVD-Video discs have high data capacity, enabling recording of multiple movies on a single disc. If, for example, one disc contains three separate movies, they are divided into title 1, title 2 and title 3. This lets you enjoy the convenience of title search and other functions.

Tracking
Marks on the map indicating the route you have traveled.

TV system (NTSC, PAL, SECAM)

Different areas of the world use different TV systems. North America uses NTSC, Europe uses PAL and SECAM, and South America uses PAL-M, PAL-N, PAL and NTSC.

Almost all are incompatible with each other. To display the video image, such as TV or DVD-video correctly, you may need to coordinate your system at the same TV system or use a multisystem equipment.

VBR

VBR is short for variable bit rate. Generally speaking CBR (constant bit rate) is more widely used. But by flexibly adjusting the bit rate according to the needs of audio compression, it is possible to achieve compression priority sound quality.

Voice guidance

The giving of directions by a recorded voice while in guidance mode.

Voice recognition

The technology that allows the system to understand the driver's voice commands.

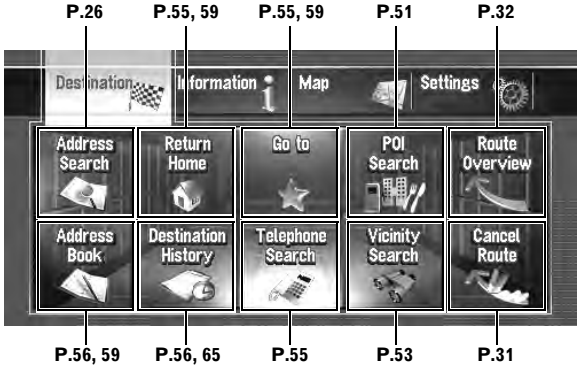
❒ In order to operate the navigation system by voice, you need the microphone kit (CD-VC1), which is sold separately. Please refer to the [Owner's Manual] for the microphone kit.

Way Point

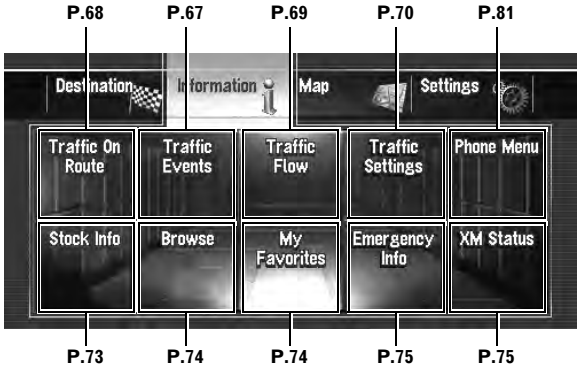
A location that you choose to visit before your destination; a journey can be built up from multiple waypoints and the destination.

Navigation menu

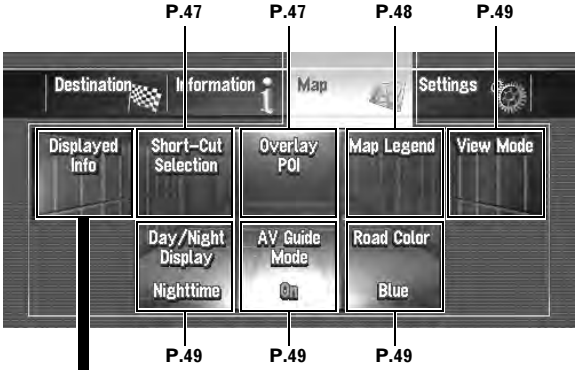
Destination menu

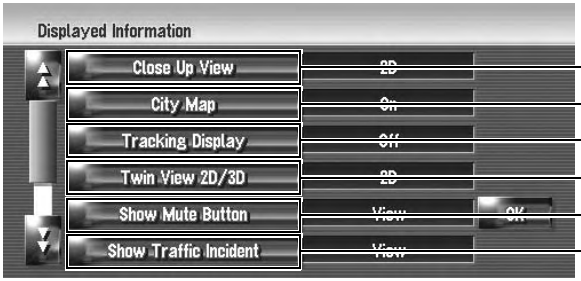


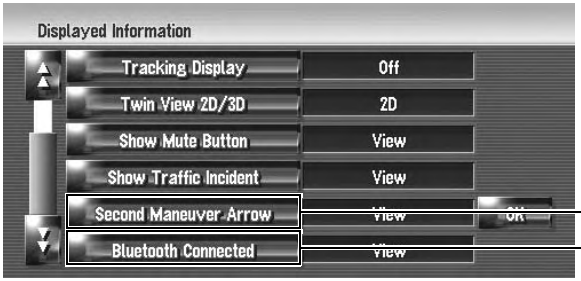
Information menu



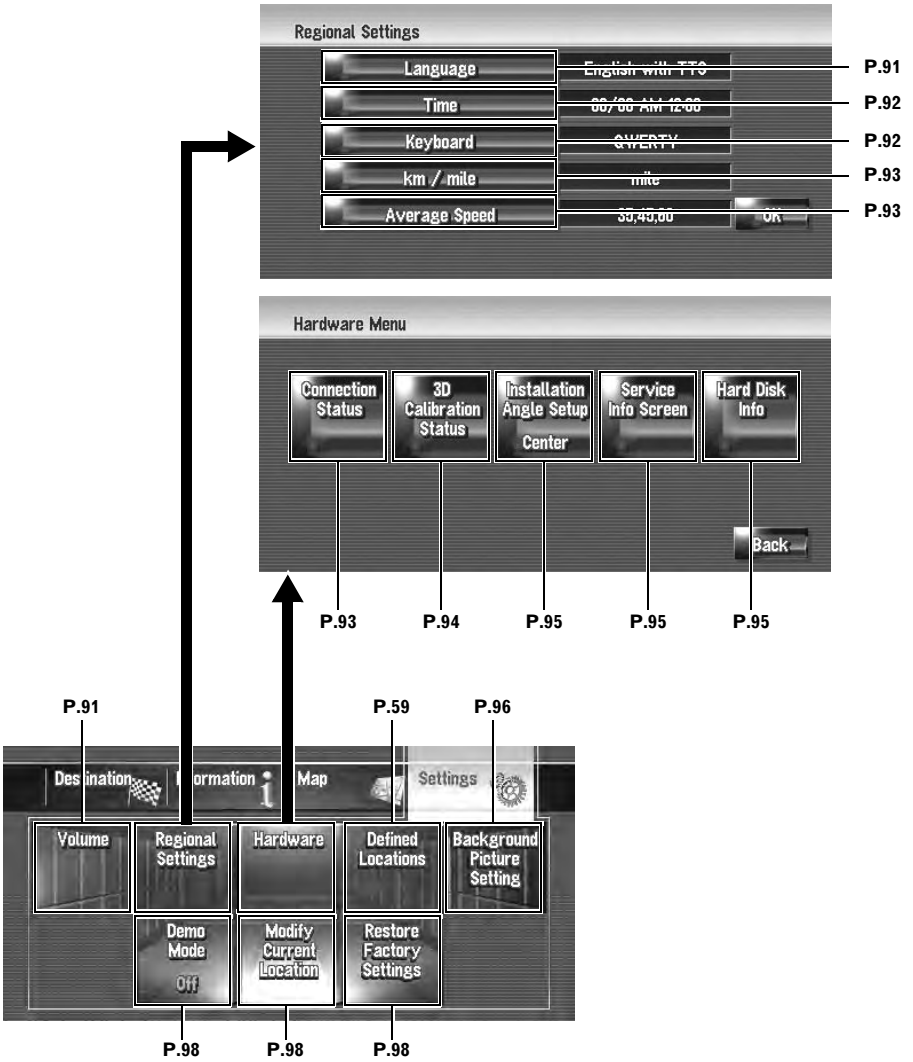
Map menu


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P.47
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Destination
Information
Map
Settings
Displayed Info
Short-Cut Selection
Overlay POI
Map Legend
View Mode
Day/Night Display
Nighttime
AV Guide Mode
On
Road Color
Blue
P.49
P.49
P.49


Displayed Information
Close Up View
2D
City Map
On
Tracking Display
Off
Twin View 2D/3D
2D
Show Mute Button
View
OK
Show Traffic Incident
View
P.45
P.45
P.45
P.45
P.46
P.46


Displayed Information
Tracking Display
Off
Twin View 2D/3D
2D
Show Mute Button
View
Show Traffic Incident
View
Second Maneuver Arrow
View
OK
Bluetooth Connected
View
P.46
P.46

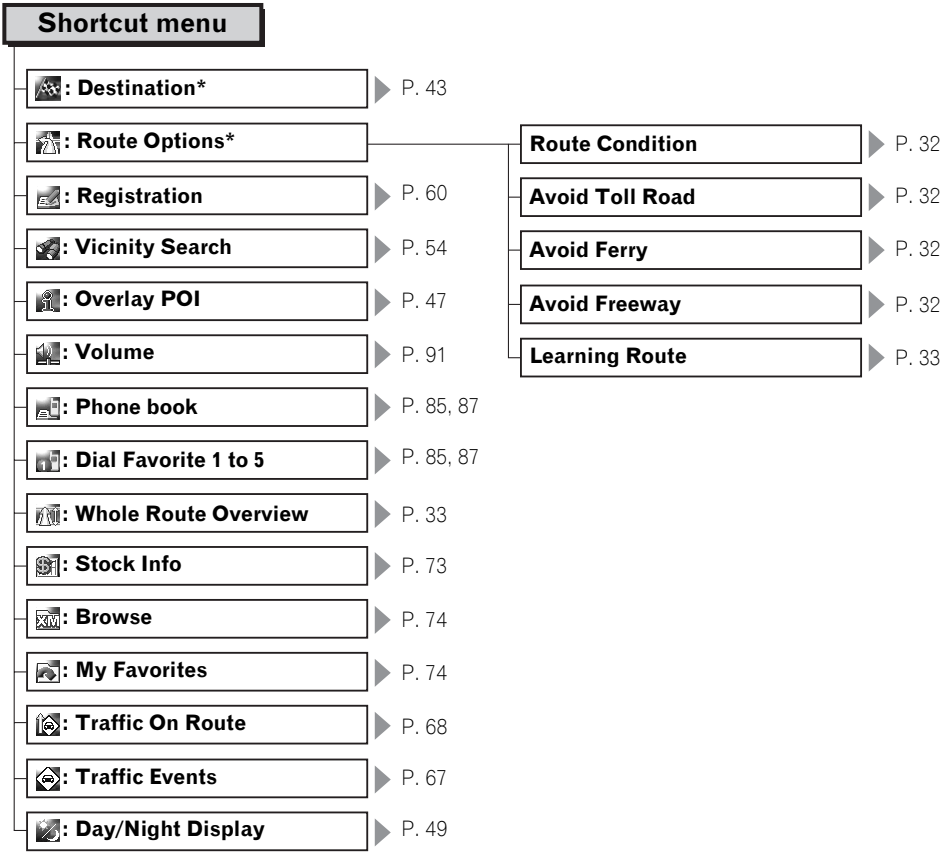
Setting menu



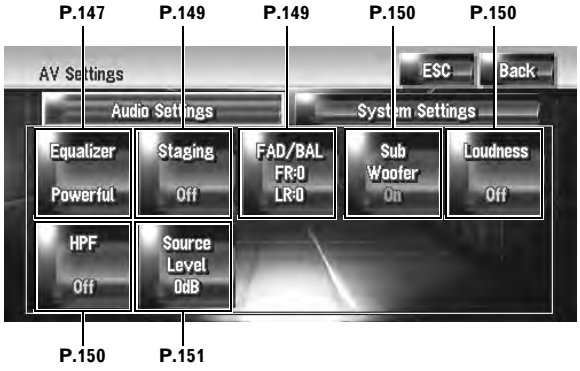
Shortcut menu

- ❒ The shortcuts displayed on screen can be changed. The shortcuts described here are those that can be selected with the system as default setting.
- ❒ Items marked with an asterisk (*) can not be removed from the shortcut menu.

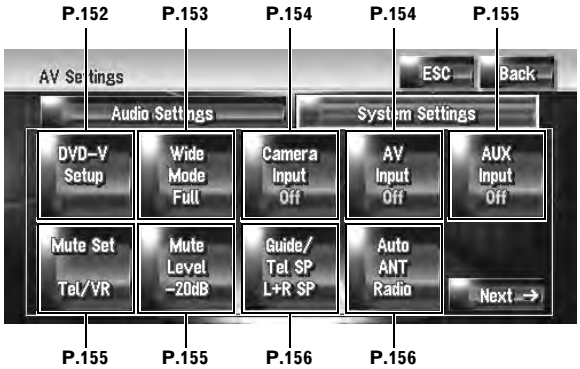
➲ Changing a shortcut ➞ Page 47



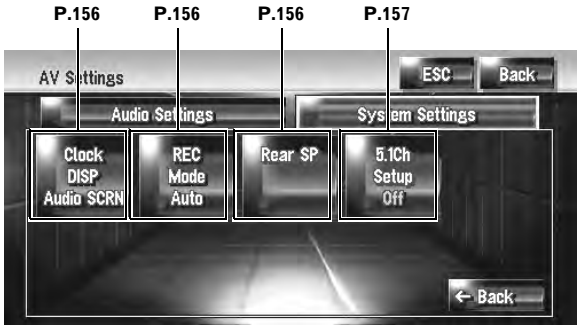
Audio Settings menu



System Settings menu (Page 1)



System Settings menu (Page 2)





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